DIPLOMARBEIT/DIPLOMA THESIS

Titel der Diplomarbeit/Title of the Diploma Thesis

“Pre-service and In-service Teacher Beliefs about Content and Language Integrated Learning (CLIL) in Physical Education (PE) in Austria”

verfasst von/submitted by

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angestrebter akademischer Grad/in partial fulfilment of the requirements for the degree of

Magistra der Philosophie (Mag.phil.)

Vienna, 19. Mai 2016

Studienkennzahl lt. Studienblatt/degree program code as it appears on the student record sheet:

A 190 482 344

Studienrichtung lt. Studienblatt/degree program as it appears on the student record sheet:

Lehramtsstudium UF Bewegung und Sport UF Englisch

Betreut von/supervisor:

ao. Univ.-Prof. Mag. Dr. Ute Smit
Acknowledgements

I am very proud that I have finally managed to complete my diploma thesis. This would not have been possible without support.

First and foremost, I want to thank my family for standing by my side and supporting my studies over the years. There have been plenty of them! A special thanks to my mother Mag. Ulrike Auer, who always had an open ear for me! Furthermore, I want to thank my husband Ing. Ronald Artner for his support, especially for being a great dad to our precious daughters when I had to work intensively on my thesis. My parents in law, Gisela and Rudolf Artner, also helped me frequently and took great care of my children – thank you! Additionally, I want to thank one of my brothers Gerhard Auer for his technical support when I hysterically called him with computer problems.

Second, I would also like to thank my supervisor Univ.-Prof. Mag. Dr. Ute Smit for the interesting introduction to the concept of CLIL during a seminar which formed the basis for this thesis. Moreover, I would like to thank her for her patience, encouragement and support.

Finally, I also would like to mention the students and teachers who participated in my study. Without them, I could not have written my thesis. Thank you!
Table of contents

1 Introduction................................................................................................................3

PART I: THEORETICAL CONSIDERATIONS ................................................................... 5

2 Content and Language Integrated Learning (CLIL)...................................................... 5
   2.1 What is CLIL? ......................................................................................................... 5
       2.1.1 The Development of CLIL ........................................................................ 5
       2.1.2 Defining CLIL ............................................................................................ 7
       2.1.3 Variations in CLIL ..................................................................................... 9
   2.2 Advantages and Challenges of CLIL ................................................................. 12
       2.2.1 Learning Outcomes ................................................................................... 12
       2.2.2 Teachers .................................................................................................... 14
       2.2.3 Language Learners ................................................................................... 15
   2.3 Pedagogic Perspective on CLIL ........................................................................ 16
   2.4 CLIL in Austria ................................................................................................ 20
       2.4.1 CLIL in the Austrian School Context ...................................................... 20
       2.4.2 CLIL (Physical Education) Teacher Education in Vienna .................... 23

3 Physical Education (PE) .......................................................................................... 26
   3.1 Didactic models of Physical Education ............................................................ 26
   3.2 Communication in Physical Education ............................................................. 31

4 CLIL in Physical Education ..................................................................................... 36
   4.1 Aims of CLIL PE ............................................................................................... 36
       4.1.1 Culture in CLIL PE ................................................................................ 39
       4.1.2 Language Use and Communication in CLIL PE .................................... 40
   4.2 Planning CLIL PE ............................................................................................ 43
   4.3 Literature on CLIL PE ...................................................................................... 47

5 Teacher beliefs ......................................................................................................... 51
   5.1 Definition of Teachers’ Beliefs ......................................................................... 51
   5.2 Development and Change of Teacher Beliefs ................................................ 55
   5.3 Functions of Teachers’ Beliefs .......................................................................... 58
   5.4 Teachers’ Beliefs and Practice ........................................................................ 59
   5.5 Research Methodology on Beliefs .................................................................. 60
   5.6 Teachers Beliefs on CLIL ................................................................................. 63

PART II: EMPIRICAL STUDY ..................................................................................... 65

6 Research Methodology ........................................................................................... 65
   6.1 Research Instrument – Semi-structured Interview ......................................... 65
       6.1.1 Considerations about the Research Instrument ..................................... 65
       6.1.2 Description of the Interview Guide ...................................................... 66
   6.2 Data Collection .................................................................................................. 67
   6.3 Transcription and Data Analysis ...................................................................... 67
6.4 Participants ...................................................................................................................... 69
7 Results and Interpretation .................................................................................................. 73
  7.1 Meaning of ‘CLIL’ ........................................................................................................... 74
  7.2 The Role of Language and Communication in PE ...................................................... 76
    7.2.1 Teacher-oriented Communication ............................................................................ 77
    7.2.2 Student-oriented Communication .......................................................................... 80
    7.2.3 Individual Teachers’ Approaches to Communication ........................................... 81
  7.3 The Suitability of PE for CLIL provision ...................................................................... 83
    7.3.1 Language learning in CLIL PE .............................................................................. 85
    7.3.2 Especially Suitable Content for CLIL provision .................................................. 87
  7.4 Cultural Learning in CLIL PE ...................................................................................... 88
  7.5 Challenges That Need to be Faced .............................................................................. 90
  7.6 Teaching CLIL PE ..................................................................................................... 95
  7.7 Summary of Findings .................................................................................................. 99
8 Conclusion .......................................................................................................................... 102
9 References ........................................................................................................................ 106
10 List of Tables .................................................................................................................... 117
11 List of Figures ................................................................................................................... 118
12 Appendix .......................................................................................................................... 119
1 Introduction

In order to do a backward roll straight you must put down both hands on the mat next to your head. (Nietsch & Vollrath 2003: 154)

Content and language integrated learning (CLIL) and related approaches have become increasingly popular since the 2000s. Both supply and demand have increased not only in Austria, but throughout Europe. One key word that has contributed to such a development is ‘globalization’ and the need to communicate with others around the world. The importance of English as a tool for such world-wide communication has increased and this need is also reflected in changes in the educational system. Nowadays, CLIL is anchored in mainstream education throughout Europe. CLIL is mainly taught in subjects of social and natural sciences and physical education (PE), as exemplified in the quote at the top, plays only a minor role.

My interest lies exactly in this combination of learning English through physical education because of my subject combination (English and PE) in the teacher qualification program. As a result, this diploma thesis seeks to discover more about CLIL PE. The focus is on teacher beliefs on CLIL PE because for successful implementation it is important to know the stakeholders’ beliefs. Dalton-Puffer & Smit (2013: 549) specify that “[…] social changes are intricately linked to how they are constructed by those concerned […]”. The thesis at hand can therefore be seen as an attempt to link theory and research findings on CLIL PE to concrete teacher beliefs by answering the following questions:

- What are pre- and in-service teachers’ beliefs about CLIL PE?
- What are the similarities and differences between these two groups?

In order to achieve my aims and to answer my research questions this diploma thesis is divided into two main parts, namely theoretical considerations and the empirical study.

The theoretical part starts with considerations regarding CLIL (Chapter 2). As a first step, the understanding of CLIL for this paper is clarified, including the development of CLIL, its definition and variations. In addition, possible challenges and advantages of its implementation are addressed. As the focus of the paper is rather applied, the practical side of CLIL research is also addressed in a subchapter from a pedagogic perspective. At the
end of this chapter the situation of CLIL and especially CLIL PE in Austria is under investigation.

In the second part the theoretical focus lies on physical education (Chapter 3). In this chapter, two different possible approaches to PE as theoretical background of CLIL PE are presented. On the one hand, prevailing didactic models are identified, briefly described and analyzed for their suitability for CLIL PE. On the other hand, communication and language use can serve as a starting point for considerations on CLIL PE.

The following chapter (Chapter 4) then seeks to combine the two aforementioned topics. This results in an elaboration on CLIL PE. First, the possible aims of a combination of PE with integrated language learning are under investigation, followed by a focus on planning CLIL PE lessons. This chapter is closed by a short literature review on CLIL PE.

The last theoretical chapter (Chapter 5) addresses teacher beliefs and defines them for the empirical study. Additionally, researching beliefs is the topic of a separate subchapter because of its relevance for the empirical study. Finally, teacher beliefs on CLIL are described.

The second part of the paper is dedicated to the empirical study. In a first step (Chapter 6) the methodological basis for the survey is laid, including the explanation of the choice of the research instrument (semi-structured interviews), data collection and data analysis (qualitative content analysis).

The following chapter (Chapter 7) aims to present results gained from the interviews and interpreting them cautiously. In doing so, the research questions presented earlier in this introduction are addressed. The conclusion (Chapter 8) sums up the most important issues that arose from this diploma thesis and carefully suggests further research areas and possible conclusions.
PART I: THEORETICAL CONSIDERATIONS

2 Content and Language Integrated Learning (CLIL)

2.1 What is CLIL?

In the following chapter, the concept of CLIL will be discussed in detail. First, the historical development of CLIL is explained, then a definition of CLIL and its variations are under consideration. Following this, the advantages of CLIL provision and possible challenges are discussed. Furthermore, a pedagogic perspective on CLIL is presented. The chapter ends with a short overview about the situation in Austria.

2.1.1 The Development of CLIL

Teaching and learning in a foreign language has a long history (Eurydice 2006: 7, Dalton-Puffer et al. 2010a: 3, Mehisto et al. 2008: 9; Bach 2008: 9). Dalton-Puffer et al. (2010a: 3) specify that for centuries receiving an education in a foreign language at prestigious institutions was reserved for the wealthy. The first multilingual programs in mainstream education were established in Canada due to demographic, economic and geographic reasons during the 1970s and 1980s (Mehisto et al. 2008: 9-10). This highly successful program of immersion provided English speaking children with a basis to foster their French language skills vital in a French speaking environment. Immersion education cannot be transferred directly to Europe and the CLIL context due to Canada’s unique language situation. However, many valuable insights could be gained and research in this area has been triggered (Eurydice 2006: 7).

The term CLIL itself was coined in 1994 (Mehisto et al. 2008: 9) as an umbrella term for different educational practices and traditions (Dalton-Puffer et al. 2010a: 2) arising from the growing interest in learning foreign languages. This is often described with the key term ‘globalization’ accompanied by increasing possibilities to communicate with people from all over the world. To participate in this development on a professional and private level, the need for more familiarity with foreign languages and cultures arose (Hallet 1999: 24). Coyle et al. (2010: 2) further attest that globalization greatly impacts which language is learnt, when and in what way. Moreover, Mehisto et al. (2008: 9) report that more and more people have started to understand the value of multilingualism, which has ceased to be a privilege of the wealthy.
Nowadays, knowledge of a foreign language can be regarded as a key qualification in the working environment, as Finkenbeiner & Fehling (2002: 15) report. This results in the necessity of education to respond “[…] to the knowledge and skills demanded in an increasingly ‘integrated’ world […]. CLIL can be seen as one form of ‘integrated learning’ designed to even better equip the learner with knowledge and skills suitable for the global age” (Marsh et al. 2005: 6). The importance of knowing foreign languages does not only apply for adults and the working environment, but also for students at school or university. Pérez-Vidal (2009: 6) adds that on the one hand young learners have many opportunities for exchange (e.g. Comenius, Erasmus) that allow students to be highly mobile. On the other hand, she names the concept of “internationalization at home” for foreign language use without actually being abroad. All these reasons mentioned in the last two paragraphs have led to grass-roots actions of teacher and parents to establish CLIL (Dalton-Puffer et al. 2010a: 4).

In addition to these bottom-up approaches a top-down approach in establishing CLIL can also be identified. On a political level, the promotion of linguistic diversity has always been a vital factor in successfully planning a united Europe (Eurydice 2006: 8). In 1995 the European Commission issued a White Paper called “Teaching and Learning. Towards the Learning Society”. In the first part of this document, challenges for the future are identified: the onset of an information society, the impact of scientific and technological knowledge and internalization of the economy. The second part describes five objectives towards building a learning society. One of them is to develop proficiency in three different languages of the European Union to benefit from the border-free market for all citizens, rather than an elite, ideally starting at a pre-school level. This objective might be met by wide-spread CLIL provision. The importance for language learning and therefore CLIL provision is stressed again in another paper by the European Commission (2003: 19):

Content and language integrated learning (CLIL), […], has a major contribution to make to the Union’s language learning goals. It can provide effective opportunities for pupils to use their new language skills now, rather than learn them now for use later. It opens doors on languages for a broader range of learners, nurturing self confidence in young learners and those who have not responded well to formal language instruction in general education. It provides exposure to the language without requiring extra time in the curriculum, which can be of particular interest in vocational settings. The introduction of CLIL
approaches into an institution can be facilitated by the presence of trained teachers who are native speakers of the vehicular language.

Dalton-Puffer (2008: 1) declares that there is a huge gap between the bottom-up approach of the EU (e.g. policy papers by EU bodies and institutions) and the local grass-roots activities (e.g. initiatives of teachers or schools). To close it, different measures have been taken, including different transnational projects like the above mentioned Eurydice report on CLIL (2005).

2.1.2 Defining CLIL

Defining content and language integrated learning is complicated because the concept is interpreted, used and labeled differently among European countries. Even within individual countries a considerable variety can be found (Wolff & Sudhoff 2015: 9). A frequently used definition is provided by Coyle et al. (2010: 1, emphasis original):

Content and Language Integrated Learning (CLIL) is a dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language. That is, in the teaching and learning process, there is a focus not only on content, and not only on language. Each is interwoven, even if the emphasis is greater on one or the other at a given time.

The issue of finding one accepted definition of CLIL is further complicated because different terms are employed to refer to this concept (Wolff & Sudhoff 2015: 14-16; Eurydice report: 2006: 8). In general, there was a vivid discussion about a common naming. Some authors (e.g. Bach 2008: 16; Bonnet & Breidbach 2004: 13-14; Marsh et al. 2005: 6) advocated for the use of the term CLIL which prevailed internationally. Nowadays, this term is most commonly used (Wolff & Sudhoff 2015: 14) and the authors (2015: 14-16) specify that many European countries, like Austria, employ the acronym CLIL. This has changed, because in Austria ten years ago EAA (English als Arbeitssprache/Fremdsprache als Arbeitssprache [EMI: English as a medium of instruction/foreign language as a medium of instruction]) prevailed (Eurydice 2006: 66). In Germany the terms Bilingualer Sachfachunterricht [CLIL]/Fachunterricht in der Fremdsprache/Fremdsprache als Arbeitssprache are still employed (Wolff & Sudhoff 2015: 14).

The definition by Coyle at al. (2010) provided above mentions three important aspects of CLIL, namely language, content, and the learning and teaching process - all of which are briefly discussed in the next three paragraphs.
First of all, it is reported that every language that is not the main language used in the school curriculum, or is the main language of the learners and the teachers can be used as the target language (Pérez-Vidal 2009: 3; Eurydice 2006: 8). However, the choice very often (95%) falls on the highly prestigious English which serves as a global lingua franca (Nikula et al. 2013: 71; Dalton-Puffer 2011: 163).

The most fundamental difference to language teaching is that the focus of CLIL lies on content (Coyle et al. 2010: 1). CLIL lessons are therefore labeled as content lessons in the curriculum and exist alongside English as a foreign language lesson (Nikula et al. 20013: 72). The starting point of teaching CLIL is content, which needs to be adapted by the teacher to suit the students’ language level. Different topics are then described, explained, reasoned and evaluated in the foreign language through interaction (Vollmer 2008: 59). Attention to language needs to be raised on a functional level. The issues of addressing focus on form and the negotiation on form need to be broached as it is necessary for the students to understand and work with content (Vollmer 2008: 49; Vollmer 2013: 125). However, language aims are implicit (cf. Dalton-Puffer et al. 2010a: 2, Wolff 2007: 16) and traditional language classrooms continue (Dalton-Puffer & Smit 2013: 546).

This combination of language and content calls for a different methodology from language teaching (Coyle et al. 2010: 1). The authors (ibid.: 4) further specify that “CLIL is an approach which is neither language learning nor subject learning, but an amalgam of both [...]”. This has not always been the case and two competing views, namely that CLIL is an expansion of the language classes or that content is simply taught via another language (Vollmer 2008: 51-57) can be identified. A pedagogic perspective on CLIL is taken on in Chapter 2.4. Vollmer (2008: 47; 52-53) considers the processes behind the language development in CLIL and states that researchers still do not know much about them.

Finally, it should be noted that CLIL is not the only bilingual educational approach and it is difficult to distinguish CLIL from approaches such as immersion or other content based approaches as their descriptions are not heterogeneous (cf. Cenoz et al. 2014 and Dalton-Puffer et al. 2014). Dalton-Puffer et al. (2014: 217) report that a term called ‘additive bilingual programs’ is already used in this context to describe an overarching concept. Despite all the differences mentioned, there are some shared features of CLIL education. The most common characteristic of CLIL is according to Dalton-Puffer et al. (2010a: 2) that
the term itself functions as an umbrella for a heterogeneity of practices. Yet another is that in Europe CLIL models with content focus prevail. Additionally, present-day CLIL is anchored in mainstream education (Dalton-Puffer et al. 2010a: 3; Rönneper & Boppré 2015: 65). Nonetheless, some authors (Wildhage & Otten 2003: 13; Cenoz et al. 2014) criticize the term as being unclear because of its different existing variations, which will be presented in the next chapter.

2.1.3 Variations in CLIL

The concept of CLIL in Europe and its development was described in the two previous sub-chapters. This account of diverse interests makes it clear that there is no one model of CLIL for all. Therefore, existing variations that require consideration during the development of a model are also presented in the next sections.

First of all, the school and the school type for CLIL provision plays a role. CLIL is suitable for different age groups and CLIL programs can therefore be found in primary, secondary and tertiary education (Wolff 2005: 11; Wolff & Sudhoff 2015: 16-19). The research of this diploma thesis focuses on secondary CLIL in the Austrian context, therefore, further descriptions primarily relate to secondary CLIL.

The choice of the CLIL language has already briefly been discussed in Chapter 2.1.2. Generally, three possibilities of choosing the target language for CLIL lessons are reported. The majority of CLIL lessons are conducted in a foreign language that is not indigenous in the state in question. This language is very often English. Another possibility is that another official state language is used as the language of instruction (Eurydice 2006: 10). Sometimes a regional or minority language is chosen for the CLIL context. In contrast, other authors (Dalton-Puffer et al. 2010a: 1; Dalton-Puffer & Smit 2013: 546) specify that CLIL needs to be differentiated from other bilingual forms of education. The target language therefore cannot be a country’s second language. A core feature of CLIL is that this language is mainly spoken in the educational context and is not used regularly in society.

Another variation can be observed in the frequency of application. This variable is for Dalton-Puffer et al. (2010a: 2) the most fundamental criterion. Coyle et al. (2010: 15-16) focus on two different scales of CLIL provision, namely extensive instruction through the vehicular language versus partial instruction. In the first model, the additional language is
used almost exclusively and switches to the first language are rare. The focus lies on content, language and cognition. The latter model, in contrast, includes partial instruction through the additional language, often in a project-based modular approach. Here too, a triple focus on content, language and cognition can be found. Wolff (2005: 15-16) elaborates on the modular approach and specifies that in modular CLIL the content, which consists of projects or thematic units, is taught in the foreign language for short periods and usually functions as an incentive for the students to make them understand the importance of foreign language use in professional life. Modular CLIL can help to introduce it to a school, but cannot be used instead of extensive instruction of CLIL.

The next issue that needs consideration is the use of the language of education in CLIL provision. Wolff & Sudhoff (2015: 20) differentiate between three types of CLIL provision that denote the frequency of the CLIL language within a lesson, namely the foreign language as the (ideally only) medium of instruction, the foreign language as the medium of instruction with the language of education as support or for complementary use. Butzkamm (2008: 91) and Königs (2013: 174-180) elaborate on the co-usage of the first language/language of education in CLIL and summarize that the view that demonizes the use of these languages is obsolete. Königs (2013: 177) stresses that code-switching in CLIL should not be seen as “kommunikative Strategie zur Überwindung fremdsprachlicher Ausdrucksschwieigkeiten [communicative strategy to overcome difficulties in expressing oneself]” but rather as

Ausdruck einer Erschließung sachfachlicher Inhalte, zu der notwendig die kognitive und auf einander bezogene sprachliche Durchdringung der Lerngegenstände und ihrer Bezeichnungen in zwei Sprachen gehört [expression of developing content knowledge to which the cognitive and verbal processing of content and the denomination in two languages belongs].

Further, the author (2013: 176-178) describes that a central aim of CLIL is the development of content competencies in two languages. Nonetheless, the use of the language of education needs to be considered carefully. Butzkamm (2008: 97-99) names seven planned possibilities to use the main language of education in CLIL, namely receptive bilingualism, usage of a textbooks in the language of education for homework, a change of the language of instruction after each year, pauses, additional content lessons to CLIL, bilingual vocabulary lists after the work phase or short phases where discourse among students is
supported. Gierlinger (2015: 363) summarizes the findings of his study as follows: “Contrary to this position [that using the L1 reduces L2 input and restricts the negotiation of meaning and L2 output of the learners] […] this study revealed a clear potential of code switching as a pedagogical and learning support tool”.

The last variation of CLIL provision, albeit an important one, relates to content. In general, each traditional non-language school subject can be used for CLIL teaching. However, Coyle et al. (2010: 27-28) state that a more flexible approach away from strict subject classes offers great opportunities for interdisciplinary projects. Wolff & Sudhoff (2015: 32) indicate that there is disagreement in the literature over which subjects are most suitable. They (ibid.) report that the choice of the content subject also depends on administrative issues. Subjects are often chosen where suitable teachers are available. In addition, educational objectives can influence the decision. Intercultural learning, for example, is rather discussed in the humanities and social sciences, whereas, for professional qualification natural sciences are chosen. Additionally, Vollmer (2013: 126-127) and Gierlinger (2015: 348) report that recent research in the field of content learning has led to a changed view on learning content, namely that “language is intricately intertwined with the learning of […] content” Gierlinger (2015: 348). Vollmer (2013: 126-127) summarizes that subject competence is reported to comprise three dimensions which act together, namely a content dimension (content knowledge), procedural dimension (the ability to structure thinking processes successfully) and a language dimension (ability to talk about content).

In summary, CLIL is characterized by a heterogeneous practice and its agreed-upon definition is likewise very broad. All the attempts to develop a precise and universal definition fail because of the above mentioned, often country-specific, variations (Wolff & Sudhoff 2015: 9-12). Since 2005 the number of books and journal articles on CLIL have increased as research on CLIL has increased in importance (Dalton-Puffer et al. 2014; Dalton-Puffer & Smit 2013: 545; Wolff 2013: 18). However, CLIL usage is as multilayered as the existing variations which is also reflected in research. A host of different research topics can be identified (e.g. stockholders, areas of learning, holistic macro perspective vs. micro perspective) and comparisons among publications and generalizations need to be made with utmost care (Nikula et al. 2013: 72-73; Wolff & Sudhoff 2015: 9-12; Dalton-Puffer et al. 2014).
2.2 Advantages and Challenges of CLIL

The implementation of CLIL shows advantages as well as challenges which will be discussed in the following paragraphs which consecutively address three relevant areas. First of all, learning outcomes related to content, the first language and the language of CLIL provision are under investigation. This is followed by addressing challenges related to the teacher and aspects of language learners.

2.2.1 Learning Outcomes

Content related learning outcomes are controversially discussed. Mehisto et al. (2008: 20) describe that the concept of CLIL is counterintuitive for many adults. This results in the common question how students can learn as much content in a foreign language as in their first language. The authors (2008: 20) summarize that CLIL students do not only outperform non-CLIL students language wise, but also show equal or better content knowledge. Windhage & Otten (2003: 18) partly explain this with the meta-linguistic awareness CLIL students develop because they need to verbalize content in thought processes, like analyzing, synthetizing or evaluating content. Dalton-Puffer (2011: 188-189) reviews research of content learning in CLIL and takes a more critical stance. She reports that results of studies about content-learning outcomes are less conclusive. Mentz (2015: 254) agrees and states that

\[\text{der Mehrwert ist für die Fächer hier nicht (oder kaum) sichtbar – eine wissenschaftliche Fundierung von CLIL aus nicht-sprachlicher Sicht somit nicht oder nur ungenügend vorhanden [an additional value for content subjects is (rather) not visible – a scientific basis of CLIL from a non-language perspective is not or is only insufficiently present].}\]

Second, the language level of the students’ language of education is also a topic of concern. According to Mehisto et al. (2008: 20) some critics argue that the extensive use of the foreign language might lead to a decrease of the language learners’ competence in the language of education by e.g. not knowing the academic register. However, the authors (ibid.) report a rather unexpected finding concerning the level of the students’ language of education, namely that CLIL students outperform their peers in writing, reading and listening in that language. Wolff (2005: 18-19) argues that a possible decrease of the language learners’ competence in the language of education can be minimized when only some subjects are provided in the CLIL language (mostly 2-3) and important terms are also
provided in the main language of education. Additionally, planned switches between the target language and the language of education can also help to improve the language competence in the latter language (cf. 2.1.3).

Learning outcomes that have triggered most research are concerned with language learning in CLIL. Some publications (cf. Dalton-Puffer et al. 2010a: 12; Dalton-Puffer 2011: 186-189; Dalton-Puffer 2008: 5; Piske: 2015: 101-115; Harrop: 2012) summarize research outcomes in the field of second language acquisition that show CLIL to be beneficial on various areas of language learning (e.g. receptive skills, vocabulary, morphology, creativity, risk-taking, fluency, emotive/affective outcome, some aspects of writing) and CLIL can therefore be qualified as a language learning environment. Other language areas like pronunciation, accuracy, complex language in writing and discourse results are less conclusive (Harrop 2012: 59-60; Dalton-Puffer 2007; 2008; 2011). In addition, there are also critics of the methodological short-comings of studies (Piske 2015: 101-102) or asking for more research to establish to what extent the positive effects already found are a result of the additional exposure to the language, and how influential the combination of content and language instruction is (Dalton-Puffer et al. 2010a: 12). There are also other explanations for CLIL students’ language competencies, including several studies which have shown that future CLIL students already have higher language levels even before CLIL education (Piske 2015: 117) because students have very likely undergone a selection process (Dalton-Puffer et al. 2010b: 282).

Nikula et al. (2013) review research on classroom discourse and they (ibid. 81) summarize that CLIL discourse resembles discourse in EFL classrooms, however, a host of findings show that because of the additional presence of a content pedagogy students interpret their roles in the classroom differently, which opens up additional opportunities for language learning. Furthermore, the authors (ibid. 86) state that the quality of classroom discourse increases in comparison to traditional foreign language learning, because students participate more actively and have the opportunity to use the language for the authentic purpose of meaning making (if student centered methods prevail). Furthermore, Nikula et al. (2013: 78) conclude cautiously that an advantage of CLIL in comparison to the traditional foreign language classroom is that “it seems plausible that [...] deep content knowledge on
the part of the teachers makes it more likely for them to feel free enough to invite students to enter into divergent thinking […] modes […]”.

2.2.2 Teachers

CLIL is mostly provided by non-native speakers of the target language. In most cases the teachers are even not educated in the foreign language, but are content experts (Dalton-Puffer et al. 2010a: 1; Nikula 2013: 71-72; Dalton-Puffer & Smit 2013: 546). Within that context, Mehisto et al. (2008: 22) analyze critically that a host of teachers are not prepared to focus on language and content skills likewise without proper training. However, attention to language needs to be raised on a functional level when issues come up during work with content (cf. Chapter 2.1.2; Vollmer 2013: 125). Harrop (2012: 60) criticizes that there seems to be no further suggestion on how to teach problematic grammatical structures as they occur. Furthermore, the author states that there is a “lack of systematic and constructive approach to error correction focusing on form in CLIL practice”. When there is error correction, it is mainly related to the lexical level.

In addition, Mehisto et al. (2008: 22) also describe the common problem of a shortage of CLIL teachers. While there is an increasing number of teachers needed as the number of CLIL programs increase, in many countries there is no special training that prepares teachers for CLIL. In Austria some in-service programs are established (cf. Chapter 2.4).

Another problem in the CLIL classroom, especially for the teachers, is the provision of suitable material. There is still a shortage of materials, with only a few textbooks being available for a limited range of subjects. Therefore, teachers need to be proactive in finding and designing material (Finkenbeiner & Fehling 2010: 16; Mehisto et al. 2008: 22). This lack impacts and adds to an additional challenge, namely a greater workload for the teachers. Mehisto et al. (2008: 22) specify that thorough planning is indispensable because teachers need to set content, language and learning goals for each lesson, therefore, the material needs to be appropriate for the language level and the cognitive level (cf. Chapter 4.2. on planning CLIL PE lessons).
2.2.3 Language Learners

Finally, language learners are also under investigation. A misconception, according to Mehisto et al. (2008: 20) is that CLIL is only for more intelligent students. He summarizes research that shows that an average student without CLIL provision is still average taking part in such a bilingual program with the bonus of knowing a foreign language better and developing meta-cognitive skills.

Student motivation is often mentioned as an advantage of CLIL (Wolff 2005: 15; Mehisto et al. 2008: 21; Piske 2015: 116). Mehisto et al. (2008: 21) describe that in CLIL lessons the language can immediately be used and is not learnt “simply for the sake of learning and future use […]”. This results in the development of cognitive academic language proficiency (CALP) and often in a higher motivational level of some students (Wolff 2005: 15; Vollmer 2008: 58). Another factor increasing the students’ motivation according to Windhage & Otten (2003: 18-19) is that in CLIL classes students’ language mistakes are often not assessed which leads to increased participation. This in turn influences the students’ self-confidence of using a foreign language. Nonetheless, Rüschoff (2015: 359) explains critically that there is not enough empirical evidence concerning motivation to make general statements, although he also points out CLIL’s motivational potential.

In addition, the suitability of CLIL for migrant children is discussed. Wolff (2005: 18-19), for example, refers to the problem that children of migrants often fail in school because of language barriers. These children often learn two languages from very early on, but only inadequately, particularly in respect to writing and reading. The author (ibid.) argues for extensive language programs which promote the children’s first language. He (2005: 19) concludes that “if we find the right way, it is still possible to integrate such problematic groups into a CLIL learning environment” without further specifying ‘the right way’. Piske (2015: 115-119), too, summarizes that a different first language seems to be unproblematic for CLIL provision, but studies that focus on learners with a different language background are missing in Germany. Moreover, the question whether CLIL provision negatively effects the learning of German is not answered.
2.3 Pedagogic Perspective on CLIL

As mentioned, the aim of CLIL is two-fold: working on content and enhancing the language at the same time. This, however, is difficult as beginners have a wide gap between their language level and the cognitive level (Thürmann: 2008: 72; Vollmer 2013: 124). The Eurydice report (2006: 8), among others, therefore calls for the development of a special approach to teaching in that the non-language subject is not taught in a foreign language but with and through a foreign language. This implies a more integrated approach to both teaching and learning, requiring that teachers should devote special thought not just to how languages should be taught, but to the educational process in general.

Coyle et al. (2010: 27) also stress the importance of this special approach when they write that it is not enough to

\[\text{translate first-language teaching and learning into another language in the hope that learners will be immerse in a bains linguistique and seamlessly learn in another language. Neither is CLIL an attempt to ‘disguise’ traditional language learning by embedding systematic grammatical progression of the target language in a different type of subject content [...].}\]

However, there is still no common CLIL didactic or methodology (Finkenbeiner & Fehling 2002: 16, Dalton-Puffer et al. 2010a: 2; Bach 2008: 12; Wolff 2005: 16). Nonetheless, the amount of bilingual courses have increased and if they have been guided by CLIL didactics, it was implicit. This has led to an increased discussion about didactics and methodological questions asked by foreign language and content didactics (Bach 2008: 16; Wolff 2005: 15). Breidbach (2008: 175) discusses the area of didactics and concludes that:

\[\text{Sachfach- und Fremdsprachendidaktiken […] nicht ohne weiteres miteinander verschmelzen, wenn sie zeitgleich unterrichtliches Handeln anleiten sollen. Vielmehr kommt es zu unbefriedigenden Hierarchisierungsbestreben, die sich bis in die Forschung hinein reproduzieren.}\]

\[\text{[content and foreign language didactics cannot merge into each other when they should instruct educational actions at the same time. It rather results in an unsatisfactory effort to hierarchize, which is reproduced into research.]}\]

Dalton-Puffer et al. (2014: 216) also acknowledge that a collaboration between content and language teachers should urgently be sought, but adds that in some countries like Germany, Finland and Sweden they already regularly publish together.
The remainder of the chapter presents suggestions how to integrate content and language learning. Thürmann (2008: 78-86), for example, researched the area of CLIL methodology and presents teaching techniques coming from language learning didactics that need to be implemented in CLIL provisions (see Table 1).

Table 1: Constitutive teaching techniques (cf. Thürmann 2008: 78-86)

<table>
<thead>
<tr>
<th>Areas of development</th>
<th>Teaching techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Language reception</strong></td>
<td>• linguistic input (slightly) above the learner’s level of competence (Krashen 1982)</td>
</tr>
<tr>
<td></td>
<td>• visual support</td>
</tr>
<tr>
<td></td>
<td>• support of reading and reading skills</td>
</tr>
<tr>
<td><strong>Language production</strong></td>
<td>• bridging &amp; prompting (= to provide the struggling learners with the words needed to continue)</td>
</tr>
<tr>
<td></td>
<td>• code switching</td>
</tr>
<tr>
<td></td>
<td>• language support of: words, phrases, basic functions (identify/classify/describe/conclude/evaluate…)</td>
</tr>
<tr>
<td><strong>Learner autonomy</strong></td>
<td>• awareness</td>
</tr>
<tr>
<td></td>
<td>• autonomy</td>
</tr>
<tr>
<td></td>
<td>• learning to learn languages</td>
</tr>
<tr>
<td></td>
<td>• study skills</td>
</tr>
</tbody>
</table>

Another rather practically oriented approach was the development of an observation tool for effective language pedagogy in CLIL by De Graaff et al. (2007). It consists of five main categories of effective language teaching from a foreign language teaching perspective and aims at helping content teachers to further their language teaching repertoire in the CLIL setting:

- Teacher facilitates exposure to input at a (minimally) challenging level;
- Teacher facilitates meaning-focused procession;
- Teacher facilitates form-focused processing;
- Teacher facilitates opportunities for output production;
- Teacher facilitates the use of compensatory and communicative strategies.

Apart from the absence of an independent methodology or didactics there is still one model that is commonly discussed in research. In the 1990s a curricular model of CLIL named the 4Cs framework was developed to raise awareness of four vital components of CLIL, namely content, cognition, communication and culture (cf. Figure 1). “It is built on the premise that
quality CLIL is dependent on understanding and adapting approaches which will not be found solely in the traditional repertoires of either language or subject teachers” (Coyle 2007: 51). The figure adequately focuses on the integration of CLIL because the 4 Cs are depicted in and next to each other, embedded within a certain context. This model can help teachers to structure their CLIL planning and highlights the necessity of integrating social, cultural, linguistic and cognitive processes as well as enhancing students’ conceptual understanding. Additionally, this model aims to encourage teachers to approach CLIL holistically (Coyle et al. 2010: 41).

The first C stands for content or subject matter. Content can either be taken from a traditional subject in school or from universal themes as global citizenship. Content learning involves working with different kinds of new knowledge including concepts, facts and procedures which learners need to apply in problem-solving activities, discussions or further processing. (Coyle et al. 2010: 27-28)

The second C, cognition, concerns learning and thinking processes. Coyle et al. (2010: 43) specify that it is vital to choose content that engages learners cognitively, also when their linguistic competence is lower. This, however requires good planning. Furthermore, the development of problem solving skills and high order thinking skills (e.g. evaluating, analyzing, creating…) is highly desired (Coyle et al. 2010: 29-30, 35, 41).

As the third C, communication (or language, as Coyle et al. 2010: 42 specify) focuses on the language necessary to construct knowledge. It consolidates content and cognition because only through language do individuals share and demonstrate understanding. Communication consists of language learning as well as language usage (Coyle et al. 2010: 35, 41). In order to conceptualize communication, the Language Triptych (cf. Figure 2) was developed. It functions as a reminder for teachers of three different types of language that are needed for learning (Coyle et al. 2010: 36-38; Coyle 2007: 51-52; cf. Chapter 2.1.3).
• Language of learning is understood as content or subject related language, like key vocabulary, expressions and terminology.

• Language for learning is the language that is necessary to operate in the CLIL environment, e.g. how to do group work or write a report.

• Language through learning is the language that individual learners need to deepen their understanding because it is assumed that learning cannot take place “without active involvement of language and thinking” (Coyle 2007: 539).

Finally, the fourth C, culture, can be found on two interrelated levels. Culture wants students to develop intercultural understanding, while at the same time learners need to learn the subject-specific norms which can be referred to as the culture of a subject discipline. Culture also aims to raise the awareness of oneself versus otherness (Coyle 2007: 51; Coyle et al. 2010: 38-40).

To sum up, an independent methodology or didactics to CLIL teaching is still missing. At the moment the 4Cs Framework seems to be the most encompassing model and therefore serves as a starting point for a discussion of CLIL PE in Chapter 4. The Language Triptych can also be implemented rather logically into the C that stands for communication. The other two suggestions by Thürmann (2008) and De Graaf et al (2007) stem from a foreign language teaching perspective and might be helpful for planning individual lessons to make sure that language is used on the right level and content is well-balanced in its presentation.
2.4 **CLIL in Austria**

At the beginning of this chapter the focus lies on the situation of CLIL provision in Austria. A short summary of the possibilities of teacher education and further education in Vienna, especially of PE teachers, follows as those teachers are the target group of the empirical research in Part II.

### 2.4.1 CLIL in the Austrian School Context

This section presents the situation of CLIL in Austria. The term CLIL will be used throughout the chapter, although different terms for this approach exist (cf. Chapter 2.1.2). The focus lies on secondary education because of the relevance for the paper at hand. Please note that there are also instances of primary and tertiary CLIL in Austria (cf. Abuja 2007: 14; Nezbeda 2005). A major obstacle in reviewing the current situation in Austria is that the data available is limited and numbers on CLIL provision might not be accurate as nearly 10 years have passed since their collection and publishing. Information is drawn from two major sources, namely the “Österreichische Sprachenkompetenzzentrum” [Austrian Center for Language Competence] and the Eurydice Network by the European Commission. This accounts for an interesting lack of federally provided data.

Eurydice (2004/05: 6-7) suggests that the importance of Vienna as a political center increased during the early 1990s. This lead to the Vienna Board of Education being asked to establish schooling for English-speaking children whose parents moved to Vienna for work. This resulted in the foundation of the Vienna Bilingual Schooling (VBS), after the Canadian immersion model, which provides free education following the Austrian national curricula in two languages of instruction (German and English). Half of the class consists of students with German, the other with English as first language. This can be seen as the precursor of the development of CLIL. Secondary CLIL provision was developed further in 1991 when the Austrian Ministry of Education set up a project group at the Austrian Center for Language Competence to conceptualize it. Up to that point the situation was characterized by “many individual bilingual initiatives and pilot projects” and a strong interest coming from a multitude of parents (Abuja 2007: 16; Nezbeda 2005: 7). Since the mid-nineties the number of CLIL classes provided in different organizational forms has increased (Eurydice 2004/05: 4). By the year 2001 CLIL was reported to be “a well-established part of mainstream education in Austria” (Abuja 2007: 22). The legal basis for
implementing CLIL in Austria is a short paragraph (§16/3) of the Austrian “Schulunterrichtsgesetz” [School Education Act], which is for Dalton-Puffer & Smit (2013: 547) an indication of a laissez-faire approach.

With the exception of a few “bilingual schools” the foreign language, which is English in most instances, is not used exclusively as the medium of instruction in Austrian secondary schools. Different organizational forms, from small projects with only a few lessons to entire streams can be found (Abuja 2007: 16-17, Nezbeda 2005: 7, Eurydice 2004/05). Other languages that are used as the medium of instruction in Austria are French, Italian and regional and/or minority languages such as Slovene, Croatian, Hungarian, Czech, Slovak, and Romany (Eurydice 2006, 18). Concerning the contents of CLIL, there is no statistical data available that indicate which subjects are used (Abuja 2007: 18; Eurydice 2004/05: 7), and research did not produce articles giving new data. Abuja (2007: 18) reports that an estimated average of 15% of all Austrian secondary schools offered “a kind of CLIL instruction” in 2007. This approach was then most popular in vocational schools (30%) followed by secondary academic schools (27%). Unfortunately, research again provides no contemporary and comprehensive data. For those students who attend CLIL teaching throughout the school-year there may be a written note in their final reports that describe the subjects taught in the CLIL language (Eurydice 2004/05: 8). Dalton-Puffer (2002: 5) summarizes this status quo adequately when she writes that “there is little information about what the “local conditions” actually look like that would go beyond the anecdotal”. This is undermined by another quote from the author (2011: 185) who says of the general situation of CLIL implementation that “[...] few of the 27 national education systems [of the EU] have actually responded with substantial investments into CLIL implementation, teacher education, and research, leaving the impetus to the grassroots stakeholder” with the exceptions of Spain and the Netherlands.

Abuja (2007: 17) states that Austrian CLIL education aims at an integration of content and language development, as discussed in Chapter 2.1. However, as Dalton-Puffer (2006: 2) describes: “In the Austrian context in particular [...] it is rather hard to obtain explicit statements about the exact goals pursued via CLIL.” The author (2007: 295) comments further that:
At present, at least in Austria, a CLIL curriculum is defined entirely through the curricula of the content subjects, with the tacit assumption that there will be incidental language gains. But why should we be doing CLIL at all if there are no language goals present? I want to argue very strongly that language curricula for CLIL should be developed, and language goals in speaking, writing, reading, and listening concretized.

This situation changed for HTLs [Austrian colleges of technology and crafts] in 2011 with the implementation of a new curriculum in the Austrian federal law gazette¹. Dorninger (2013) describes in the introduction that students of such technical vocational schools need to reach a B2 level in English according to the Common European Framework of References which is a challenge because of the limited number of regular EFL lessons in such schools. Therefore, learning English in other lessons is beneficial. He describes that subjects with a technical language in English lend themselves to such an approach. The BMUKK [Federal Ministry of Education, Arts and Culture] (2013: 2) (now BMBF [Federal Ministry of Education and Women’s Affairs]) explicitly names three different aims of CLIL provision in HTLs, namely an increased language competence, the promotion of employability and active citizenship. In the curriculum CLIL is anchored in three different parts:

- General educational objectives: In this part it is stated that students enhance their foreign language competence through CLIL provision (BMUKK 2013: 1).
- School autonomous regulations concerning the curriculum: In this part it is explained that CLIL subjects can be any subjects except religion, German and English, but technical theoretical subjects should be favored. Students from the third year onwards are required to have at least 72 CLIL lessons per year in coordination with traditional EFL classes. The subjects and the number of lessons can be chosen by the schools autonomously (BMUKK 2013: 3).
- Didactic principles: CLIL is described as integrated learning which aims to foster language competence as well as content knowledge (BMUKK 2013: 6).

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¹ BGBI. II Nr. 300/2011, Anlage 1
2.4.2 CLIL (Physical Education) Teacher Education in Vienna

“Initial and in-service education in CLIL is a requisite for consolidating this approach into mainstream education” (Frigols-Martin et al. 2007: 39). Therefore, in- and pre-service teacher education and further education of in-service teachers plays an important role in the European discussion about CLIL (Wolff 2013: 22):

Eine zentrale Herausforderung für die erfolgreiche Weiterentwicklung des bilingualen Unterrichts ist die Gewinnung und Qualifizierung von Lehrkräften. (Röhneper & Boppré 2015: 72)
[A central challenge for the successful development of bilingual education is to gain and qualify teachers.]

This challenge of educating teachers can be met two-fold, namely to offer lectures/seminars for pre-service teachers and further education for in-service content teachers. Therefore, the next two sections focus on the situation for future and in-service PE teachers in Vienna as this is the target group for the empirical research in Part II. This account might not be representative for Austria in general because as Abuja (2007: 19) explains, in the Austrian context “there is no nation-wide coordination” and therefore, institutes design their courses individually.

To teach in an Austrian secondary school teachers need to enroll in a teacher education program and study two subjects at university. CLIL teachers in Austria are ideally either those who have studied a content subject and a language or those who have participated in further education seminars. From personal experience, however, I know that sometimes content teachers without any language training need to hold CLIL lessons. In principle, no additional formal qualification is needed for Austrian CLIL teaching (Abuja 2007: 19).

Abuja (2007: 19) reported that in 2007 intensive CLIL education for pre-service teachers was not provided. To examine the situation for students of PE, research in the online course directory of the University of Vienna for the summer term 2016² was conducted with the aim of showing the possibilities interested pre-service teachers have to develop in the field of CLIL. Unfortunately, no course could be found. As part of the curriculum in PE or the general pedagogical education, which is mandatory for all students in the teacher education program, no class could be found that deals explicitly with CLIL.

² http://online.univie.ac.at/vlvz?extended=Y&semester=S2016&fakultaet=-1&lang=en [01.04.2016]
After completing their degree, teachers in Austria are offered classes of further education at the Pedagogical Institute\(^3\). Teachers can choose seminars from a multitude of different areas. Most of the classes on CLIL are provided for primary teachers, including two for PE. However, there is no specific CLIL class for secondary teachers in this content subject. What is offered (apart from courses for teachers of other subjects) for all teachers is the First and the Advanced Cambridge Certificate ("CLIL-teachers: Boost your English Cambridge First (FCE)"; "CLIL-teachers: Boost your English! Cambridge Advanced (CAE)") to enhance their language skills and a class on team-teaching ("Team-teaching in a DLP-CLIL-setting"). Additionally, the Pedagogical Institute in Vienna offers two semester courses (8 ECTS) on CLIL, one for secondary school teachers and one for HTL teachers. To participate in these courses a language level of B2 and B1, respectively is required. This seems to be rather liberal if one considers that the students from secondary schools should reach a B2 level for their school leaving examination. In comparison, some German states demand a higher language (C1) level to participate in state-provided courses (Rönneper & Boppré 2015: 72).

Interestingly, Abuja (2007: 22) summarizes that "[...] there is sufficient provision of materials as well as pre- and in-service teacher training", a view which I oppose. True, there are some classes concerning a basic CLIL competence and language support for in-service teachers. However, there is no course at the University of Vienna which offers extended CLIL training during teacher education and there are no classes at all for secondary PE teachers. Materials for CLIL PE are also hard to find (cf. Chapter 4.3).

To summarize, is difficult to reach an agreed-upon common definition of CLIL because of a variety of practices subsumed under this umbrella term. Furthermore, it is difficult to distinguish CLIL from other bilingual approaches. Different countries and even within countries CLIL is interpreted differently. There are variations concerning schools, content, language, the frequency of application and the use of the language of education. In addition, different terms are used for this concept, however, the term CLIL is most commonly used nowadays. An agreed upon, but rather all-encompassing, definition views CLIL as language and content learning with the aim of enhancing both areas (cf. Coyle et al.

\(^3\) [http://www.phwien.ac.at/index.php/hochschullehrgaenge-fortbildungsangebot/fortbildungsangebot](http://www.phwien.ac.at/index.php/hochschullehrgaenge-fortbildungsangebot/fortbildungsangebot) [http://www.phwien.ac.at/index.php/hochschullehrgaenge-fortbildungsangebot/lehrgaenge#article-id-496] [01.04.2016]
The language of CLIL provision can be any language, but is mostly English and classes are commonly timetabled as content lessons. Content can be selected from a whole range of subjects. In the selection process administrative considerations, like teacher availability often play a role. Teachers are very often content-teachers without further CLIL education. In Vienna some courses on CLIL are provided for in-service teachers, but none for pre-service teachers or specifically for secondary PE teachers. Despite the difficulty of comparing research findings, they show that the students’ language skills are fostered. In order to teach CLIL successfully, a different methodology from language teaching is required, but not yet established. The 4C’s model provides the most encompassing approach to CLIL teaching.
3 Physical Education (PE)

Physical education differs from all other subjects and therefore holds an exceptional position within education. Its main characteristic lies with the focus on bodily movement, physical activity, sports and games. Instructions and explanations can immediately be carried out physically (Nietsch & Vollrath 2003: 147-148; Trömmel 2006: 42; Volckart 2013: 24). Different materials (objects and equipment) are also used that can be experienced through bodily movement (Lightner 2013: 360). Additionally, the setting (classroom vs. gymnasium, sports hall, swimming pool, playing field) is different. Generally, the atmosphere is often described as relaxed and positive (Nietsch & Vollrath 2003: 147-148; Volckart 2013: 24; Rymarczyk 2004: 289; Rottmann 2006: 76-77). This is apparent by the positive attitude most students hold towards PE. Two possible reasons are the emphasis on the affective component and the low pressure concerning grades (Nietsch & Vollrath 2003: 147; Lightner 2013: 361; Rottmann 2007: 205). Pühse & Gerber (2005: 76) specify that:

P.E. is obligatory, and thus marked. Discussions arise periodically about abolition of grades in P.E. [...] P.E. teachers are formally required to evaluate not only the students’ performance, but also their efforts, social skills and teamwork. [...] Usually, Austrian P.E. teachers are generous in their grading, and hardly ever give a mark below 3 [...].

The next two sub-chapters lay a theoretical basis to clarify the subject of PE for the following discussion of CLIL PE (Chapter 4) and the research conducted in Part II of the paper. First, didactic models of physical education prevalent in German-speaking countries are addressed. It should be noted that the teaching tradition in the Anglo-American language area is different. Secondly, language use and communication in PE are under investigation.

3.1 Didactic models of Physical Education

In this context a didactical model can be understood as a thought through, written plan of the organization of physical education. Didactical models answer questions about the legitimation of PE (Why?), about the guiding principles (For what reasons?), about the central content areas (What?) and about favored methods (How?). Concepts show in that respect different pedagogical positions how to organize PE.

Kuhn (2009: 114) explains that the discussion of didactic models of PE started in the 1970s with a change of the German curriculum. Until then, leading researchers in sports pedagogy and didactics tried to formulate their perspectives related to the teaching of sports, movement and performance. Nowadays, in the discourse about didactic models three main approaches, namely traditional, pragmatic and alternative positions can be identified. However, not all models be categorized nor discussed in this paper since there are too many. Hummel & Balz (1995: 28, emphasis original), for example, try to categorize all models and say that:

[E]s ist [...] deutlich geworden wie komplex das Geflecht [...] von “Fachdidaktischen Modellen” [...] überhaupt ist und wie unübersichtlich sich das Ganze in einem geradezu gewaltigen Literaturangebot darstellt. [It became clear how complex the area of “didactic models“ is and how overwhelming it is presented in a vast collection of literature.]

The models exist either alongside each other or they are discussed controversially (Aschebrock & Stibbe 2013: 10, Balz 2009: 25; Kuhn 2009: 114; Stibbe 2013: 20). The following paragraphs describe the aforementioned three major positions and their main representative, albeit it is, and can only be, a short overview of the positions in discussion. Their content is presented in a simple way and reduced in complexity. Further (critical) discussions of each pedagogical approach exist, but will not be discussed.

First of all, there is the traditional position. The common ground of approaches subsumed under this label is the aim of improving motor skills and techniques through sports. Physical education has to prepare students for the reality of extracurricular sports and therefore, reproduces it. In this context Kurz (1990: 43) talks about a “Didaktik reduzierter Ansprüche” [didactic of reduced requirements] because these approaches do not incorporate additional pedagogic principles (Kurz: 1990: 43-44). The following pedagogical approaches belong to this affirmative position:

• “Intensivierungskonzept” [intensifying approach] (main representative: Stiehler 1974): The legitimation of PE is seen in the physical development of extracurricular sport and life in general. The main aim is to increase the students’ physical capacities with rather traditional sports and drills. Here, the teaching style is also deductive and teacher-oriented (cf. Hummel & Balz 1995: 38; Kuhn 2009: 115).


• “Entpädagogisierungskonzept” [approach of anti-didactics] (main representative: Volkamer 1987, 1995): This concept focuses on students enjoying sports in general and PE without the inclusion of any pedagogical aims. On the content level different sports are part of the lessons. The prevailing teaching style differs from the aforementioned concepts and can be described as rather open, inductive and student-oriented (cf. Balz 1992, 14-19; Ehni 2000: 28; Kuhn 2009: 115; Volkamer 1995: 58-63).

The second and opposing position is the alternative or educational position. The common ground of approaches belonging to this position stresses the importance of education in PE. Physical education is seen in direct opposition to commercial sports. Two main didactic approaches can be identified.

• Bewegungserziehungskonzept [movement education approach] (main representative: Größing 1995): In this concept the focus is on discovering the human culture of movement, games, expression and health. It aims at individual meaning-making of these different cultures, as well as self-discovery during the engagement with different opportunities of movement and sports in PE. Content is generated from different dimensions of meaning that underlie PE, namely achievement, control, playing, risk taking, expressing and showing, recreation and well-being. The methods used are rather open, inductive and student oriented (Ehni 2000: 25; Größing 1995: 49-57; Hummel & Balz 1995: 38; Kuhn 2009: 117).

Thirdly, pragmatic approaches position themselves in the middle of the continuum of physical education towards and through sports. They aim at a combination of the development of athleticism through sports and education through movement.

• “Konzept der Mehrperspektivität” [multi-perspective teaching approach] (main representative: Ehni 1977): The role of PE is to discover sports, movement and games from different perspectives (e.g. cognitive, social, related to motor skills), to make informed decisions about sports and to allow students to act role-specifically, function-specifically and situation-specifically in the field of sports and movement. The content covers a variety of different areas from sports to games and exercises. The teaching methods differ with their aims and can either be open or closed, inductive or deductive, teacher or student-oriented (Bräutigam 2009: 96-99; Ehni 1977: 108-112; Ehni 2000: 28-29; Kuhn 2009: 118).
• “Handlungsfähigkeitskonzept” [approach of the capacity to act] (main representative: Kurz 1990): PE wants to educate students to become sportspeople who can act competently in different situations (sports specifically and across sports) in the field of sports. Therefore, students should be familiarized with the meaning of movement and sports. Content wise all kinds of different sports and movements are used and lessons are organized across six dimensions of meaning of sports (performance, excitement, movement expression, impression, health education, cooperation). The teaching methods differ with their aims and can either be open or closed, inductive or deductive, teacher or student-oriented (Bräutigam 2009: 96-99; Dietrich & Landau 1990: 73-75; Ehni 2000: 28-29; Kuhn 2009: 118-119; Kurz 1990: 85-103; Kurz 1995: 41-48).

In practice it is usual that teachers do not have a specific didactic model as presented above in mind when they plan their lessons, they rather construct their own model. Bräutigam (2009: 92) specifies:


[Each PE teacher has his/her own didactic approach in mind. It comprises pictures and beliefs about sports, PE and education, which result from different contexts of action. Experiences and insights from one’s own biography (as sportsmen/sportswomen and as students), from academic studies and vocational training and from daily experiences of teaching are mingled together to a conglomerate of didactic knowledge. It offers security and orientation for one’s own actions, like a “didactic map”.

The author (ibid.) recommends that teachers should know about the didactic models and reflect on their personal approaches in order to improve them. Kuhn (2009: 117) argues that the movement education approach prevails in the Austrian context because of the pedagogic tradition and the orientation away from competition. However, I would rather agree with Bräutigam (2009: 92) that teachers have their own concept in mind depending on various factors, like socialization, education, vocational training etc.
Consequently, for the combination of PE and an integrated learning with English a different theoretical approach seems to be more feasible for two reasons. First, the didactic models aim at describing PE, but do not specifically focus on language use, yet language and communication form an important basis upon which CLIL PE lessons can be built. Second, as described in the preceding paragraphs, it is even contested that teachers have one specific underlying didactic model in mind. Therefore, the next chapter focuses on the analysis of potential speaking opportunities in PE lessons and hence the resulting possibilities for integration with language learning.

### 3.2 Communication in Physical Education

Language use and communication play an important, but often not explicitly discussed role in PE. However, if an integration of PE and language should offer successful opportunities to improve the language, the role of language use and communication needs to be made explicit. The aim of this section is to show how communication and language can be used in PE. Its extent is by no means equal for all teachers and it depends on the respective didactic approach to teaching PE (Chapter 3.1). Still, there are certain opportunities for language use that can be observed. The following quote by Strangwick & Zwozdiak-Myers (2004: 61) functions as a basis for further input.

> Clearly, communication is crucial in all teaching. Without communication, teaching cannot take place and poor communication leads to garbled and incomplete messages which result in inadequate learning.

Each subject has its own communicative traditions and demands, but PE is different in respect to other subjects twofold. First of all, the spatial conditions in with PE take place strongly influence language use in PE. Locations like a gymnasium, a sports hall, a swimming pool or a playing field often make communication difficult and especially demanding for the PE teacher’s voice. Second, in PE the focus lies on the practical nature of sports (Strangwick & Zwozdiak-Myers). As a consequence real speech opportunities constantly arise, e.g. from tactical situations or those related to motor skills, in specific social contexts or emotive situations (Nietsch & Vollrath 2003: 148; Rottmann 2006: 78). However, language and communication play a lesser role in PE than in other content subjects (Nietsch & Vollrath 2003: 150; Rottmann 2006: 78). Achtergarde (2007: 185) describes a common view among PE teachers, namely that students should be engaged physically and therefore
there is no room for longer conversations because they reduce time for important activities. However other authors, like Strangwick & Zwozdiak-Myers (2004: 61) emphasize that “good use of language is essential”. Bloderer (2009) exemplifies strategies for such good use, like deliberate and positive connoted phrasing. An example of this would be the use of ‘Good’ instead of ‘Not bad’. He addresses PE teachers with his article, but the underlying principles seem to be valid for teaching in general.

To improve the quality of PE, Achtergarde (2007: 185-186) strongly argues for an increase in student-talking time. To reach this aim, he names two strategies that lead to more autonomy and independence of the students in PE. First, students need opportunities for meaningful interaction during the lessons and they should be encouraged to verbalize movement and exercises as often as possible. Second, the teachers’ flow of words needs to be intermitted. Generally, the longest phases of communication occur traditionally at the beginning and at the end of the lessons. Achtergarde, however, criticizes this practice because these periods are often perceived as boring and they are not effective. Klingem (2013: 176) also reasons for including communication as content of physical education. This requires more engagement from teachers and students alike at the beginning, but in the long run positive effects can be expected:

- Students may participate more actively thus lessons become more diverse and dynamic. This in turn leads to an increased motivation and more interesting classes.
- This improved interaction can facilitate the development of students’ self-confidence and autonomy, as well as improving self-centered and self-reliant learning.
- Practical skills and the ability to cooperate as a team increase.
- Classroom disturbances, motivational or disciplinary problems diminish.

Furthermore, all these points can notably lift some pressure from teachers. The following paragraphs show how language is used during PE and how meaningful student talking-time can be increased.

The first element of language use and communication in PE is general language that plays an important role. Nietsch & Vollrath (2003: 150-151) state that “diese allgemeine Kommunikation tritt im Sport stärker als in anderen Fächer auf, da soziale Prozesse hier eine größere Rolle spielen [this general language use occurs in PE more often because social
processes play a more important role in PE than in other subjects]” and enumerate such occurrences: Even before PE classes start, students often come and ask about the program. Another example are excuses of those who do not participate, those who come late or who have forgotten their sports kit. Such occurrences of general language can be found throughout the sports lesson, either in the form of one to one communication, in small groups or with the whole class. Possible topics range from asking for help or for information, solving conflicts or disciplining. In PE it is almost impossible to prevent arguments because of the affective nature of games. Communicative competence is central to solve such situations (Frei & Rottländer 2007: 100). Clearly, all this language use can also be easily adapted and transferred to other situations outside the gym.

The second area of speech opportunities relates to explanations. During processes of organization (e.g. arrangement of the equipment), discussions of the activities, exercises or during games students rather listen to the teacher’s explanations and talk less. However, this information does not necessarily always need to be oral - students can also be provided with written flashcards (Nietsch & Vollrath: 2003: 151) or explain short sequences themselves.

Thirdly, cognitive phases of theoretical work, evaluation and reflection are also an integral part of PE because students need to understand the course of a movement (e.g. description of the shot put sequence) or tactics of a game. This aims at developing and quickening learning processes (Rottmann 2006: 238). Achtergarde (2007: 197-198) and Klingen (2007: 76) refer to the importance of improving motor imagery for improving motor behavior:

Das Lernen sportlicher Handlungen geschieht immer ganzheitlich. Es findet im Zusammenwirken von motorischen, kognitiven, emotionalen und sozialen Prozessen statt (Klingen 2007: 76).
[Learning of motion sequences always occurs holistically. Cognitive, emotional, social and motor processes need to work together.]

Verbalization of movements and reflections are two important strategies to improve this area. Normally, these cognitive phases take the form of discussions (Nietsch & Vollrath 2003: 152; Achtergarde 2007: 185), however, such discussions and reflections which commonly involve the whole class are often described as unproductive because only some students participate (Achtergarde 2007: 185). Therefore, Achtergarde (2007: 203) recommends interaction in small groups, including a clear aim and setting. Another
problem is that students’ answers are very often only keywords. Achtergarde (2007: 204-210) suggests the “Stichwortmethode” [keyword approach] where students have to answer in cohesive sentences and need to include pre-defined points or an approach where students first need to discuss a question in pairs before one presents their findings. Rottmann (2007: 220) also specifies that reflection allows students to develop an inside perspective of movement that is different from an outsiders’. These reflective periods can lead to mental images of movement and subsequently, to verbal descriptions thereof. The author argues that students should have the opportunity to choose an approach of reflection individually from a variety of possibilities: e.g. drawing analogies to other sports or everyday situations, referring to biomechanical, anatomical, emotional experiences, etc.

Feedback is another important area in a holistic approach of motor learning. Nietsch & Vollrath (2003: 152) argue that feedback, especially for young students, is mostly given by the teacher. The reason is that those learners often only discover severe mistakes, but do not have the relevant knowledge to find the cause of the problem or to provide strategies to solve the issue. In contrast, Achtergarde (2007: 214-215) criticizes this approach and argues that it is unfavorable for one teacher to correct 30 students. Consequently, it needs to be self-evident to enable students to correct their own performances as well as that of their peers. In order for this to work, the development of specialist language is necessary which students need to develop gradually (Strangwick & Zwozdiak-Myers 2004: 67). Additionally, students need to develop the analytical skills mentioned before. Generally, it is important that feedback is given in a way that is encouraging for students. Thiel (2002) provides important factors that need to be considered. The information included in the feedback needs to be relevant for the students. In addition, it has to be situational, transparent and it has to be oriented on the actual performance.

Achtergarde (2013: 52) suggests an additional creative opportunity for language use, namely in the form of sport commentaries. On the one hand, students learn to verbalize different tactics or techniques, mostly of ball games, in an interesting and engaging way and on the other hand, students can experiment with their public speaking skills. Moreover, this method can be used for a critical discussion about sport commentaries. The author (ibid.) recommends them for younger learners and adds that the atmosphere in the class is an important criteria for its implementation. Not all students might be interested in giving
it a try and Achtergarde (ibid.) strongly argues for voluntary participation. There are two possible ways of implementation, namely to record it to work on it later or a loud presentation for the whole class. The author argues for a step by step approach to prepare students for this difficult and complex language use and argues for pair-work in order to achieve this task successfully.

Until now spoken interactions were described. However, in addition to verbal communication non-verbal communication and demonstrations are vital elements of successful PE instructions (Strangwick & Zwozdiak-Myers 2004: 61-62). Furthermore, written language is often neglected in PE, nonetheless “there are many instances where the written word (e.g. flashcards or written instructions) is appropriate, useful and can support the development of pupils’ reading skills.” (Strangwick & Zwozdiak-Myers 2004: 70).

To sum up, language use and communication play a more prominent role in PE than it might seem at first glance and range from general language, explanations, verbalization of movement, evaluation and reflection to feedback. In order to improve the quality of PE, to promote learner autonomy and self-reliant learning the student-talking time should be increased (cf. Achtergarde 2007). This reported language use as well as a fair amount of student-talking time seem to lay a good basis on which content and language integrated learning could be built. How PE and language learning could be combined is investigated in the next chapter.
4 CLIL in Physical Education

This chapter deals with the integration of content (PE) and language learning (English). The possible aims of CLIL PE are presented and discussed, followed by a section of issues arising in planning CLIL PE lessons. An overview of the research tradition on CLIL PE concludes this chapter.

4.1 Aims of CLIL PE

Generally, physical education does not play a prominent role in the discussion of CLIL because it does not belong to the traditional canon of CLIL subjects (Rymarczyk 2004: 289). A recurring argument in this respect is that in PE the focus is primarily on movement not on speaking. It is often described that language plays only an incidental role to organize movement, a view which has been proven to be invalid (cf. Chapter 3.2; Lighter 2013; Rottmann 2007: 205, Rottmann 2006: 75). Rottmann (2007: 205) gives two reasons why CLIL PE has not been widely anchored within CLIL teaching. First, not enough PE teachers have the language qualifications to teach in a foreign language and those who do “often balk at the additional thought and preparation it takes to teach PE in a language other than their mother tongue”. Second, there is still no standard method how to best integrate language with sports and movement learning. This leaves teachers to develop useful methods for themselves.

Nonetheless, there are arguments that speak for the integration of PE in a CLIL setting. Nietsch & Vollrath (2003: 149) for example developed a model depicting three aims of CLIL provision, namely content, culture and communication. Additionally, they show learning outcomes on the content level, of content specific and general language. However, as shown in Chapter 2.4, CLIL can be depicted with the help of the 4Cs’ framework and its focus on the areas content, communication, culture and cognition. Therefore, I used Nietsch & Vollrath’s model (and some of their examples) to integrate the 4th C, cognition, of this widely accepted model to CLIL PE (Figure 3). Additionally, I tried to embed the areas of the language triptych. Culture, content and communication (in light grey) can be depicted as separate, but interacting, categories with aims that can be achieved in CLIL PE. Cognition (dark grey), however, takes a special position. Certainly, CLIL PE also aims at the development of cognition and the promotion of higher order thinking skills (e.g. analyzing,
assessing, creation, predicting, expressing opinions, reflecting, making judgments, solving tactical problems; examples taken from Coral i Mateu 2013: 46). Nonetheless, cognition cannot stand as a separate category because it is indivisibly linked with content and communication. Furthermore, language for learning, language of learning and language through learning are employed to reach the aforementioned aims. Students thus learn about culture, content, content specific and everyday language which can be described as successful integration of CLIL in PE.

Essentially, the content of the subject physical education is to be taken from the national curricula for the respecting age group and school type. The Austrian PE curriculum comprises six different themes of physical activities (basics of movement practice, skill-
performance-oriented activities, playful activities and games, creative and performing activities, health-oriented and compensatory activities, and adventure oriented activities) rather than prescribing particular sports. Each theme holds different activities that can be chosen as content for PE. The content’s focus can be determined by the teacher and their underlying understanding of sports. This freedom of choosing one’s own emphasis shows the potential of CLIL PE to integrate cultural aims and improve the learners’ communicative competence. Approaches subsumed under the traditional position restrict language learning in a CLIL setting. The problem is that these approaches with the exception of Volkamer’s model (1995) largely focus on the teaching of techniques and the honing of the body. The language required is likely to be technical, short and teacher oriented. Volkamer, in contrast, rejects any pedagogic aims and therefore language learning aims as well. In comparison, the alternative approaches open up more opportunities for communication and language through addressing physical, cognitive, social and affective processes and are therefore suitable for CLIL provision. However, pragmatic concepts might lend themselves even better to approaching CLIL PE because of their comprehensive education goals and therefore wide range of communicative opportunities. Ehni (1977: 129), for instance, explicitly comments on the importance of communication:


[If it is true that the act of moving is always determined, described and denoted by language then it should not only be the teacher who disposes sports in this perspective of reality in the form of “verbal instruction”. Rather, students also have to establish, present and therefore (better) understand their body-related and primary reality with the help of language.]

The following sections deal with two of the curricular aims, namely, culture and communication as they offer various opportunities for language integrated learning. As previously pointed out in this chapter the content is determined by the national curricula and forms the basis on which language and culture can be integrated. The following descriptions do not follow a special didactic model, but collect possibilities from different angles.
Culture in CLIL PE

Culture is not only an integral part of the concept of CLIL, but is also anchored in the general part of the Austrian curriculum.


Cross-cultural learning is not limited to learning about other cultures. The focus, moreover, lies on cooperative learning and in the understanding, the experience and joint shaping of cultural values. In addition, interest and curiosity about cultural differences should be piqued to understand not only the value of cultural uniformity, but also diversity.

Coral i Mateu (2013: 46) understands the terms cultural learning and the development of citizenship as: “[...] personal development, social interaction, inter-cultural understanding, cooperation and teamwork. Developing a motor content such as sports through a foreign language fosters international understanding by setting the context of the content in different cultures”. Culture, in a narrow sense, can be addressed very well in CLIL PE because typical sports from English speaking countries lend themselves as material through which different practices and traditions in the field of sports can be discussed. Often these sports keep their technical language and students already know many of those words (e.g. *einen Ball dunken*; *a grind in skating*) (Schmidt-Millard 2004: 320; Rottmann 2006: 244; Menze-Sonneck & Devos 2013: 81). Examples are provided in the form of lesson plans for the introduction of flag football, a variation of American Football without physical contact (Trömmel 2006) or beach volleyball (Kittsteiner & Neumann: 2001). Furthermore, culture in a wider sense can also be discussed when e.g. cultural values behind these sports are addressed. Moreover, influences of different cultures on the students’ environment can be made. Achtergarde’s (2013: 52) approach (cf. chapter 3.2) of using sports commentaries also opens up cultural learning opportunities. On the one hand the culture of representing sports differently can be discussed and on the other hand a comparison of underlying values in different cultures might reveal surprising cultural insights. Cultural learning can be further enhanced by an inclusion of projects. The collaboration can either be with other content subjects (e.g. Olympic Games in history) or in lessons of English as a foreign
language. Additionally, sports clubs can further broaden the students’ horizon (Nietsch & Vollrath 2003: 149; Hofmann & Sinning 2006: 8).

4.1.2 Language Use and Communication in CLIL PE

The chapter on communication and language use in PE (Chapter 3.2) presents numerous opportunities how to use language in PE. This section seeks to combine the communicative potential of PE with language learning. In CLIL PE the same opportunities can be utilized to focus also on language learning. Generally, CLIL PE can provide students with an authentic possibility to use their foreign language skills (Hofmann & Radicke 2009; Volckart 2013: 24; Lighter 2013: 361; Schmidt-Millard 2004: 320; Coral i Mateu 2012b; Devos 2013: 95).

Furthermore, class talk can “take a step beyond mere auditory-receptive language use by involving the student in active foreign language conversations [...] which may therefore enable various learning opportunities” (Rottmann 2007: 224). CLIL PE might even lead to a better use of language in PE per se because language and communication needs to become an integral part in planning PE lessons. In order to achieve a language sensible CLIL environment, according to Leisen (2015: 233), three factors have to be considered:

- The learners need to be engaged in contextually authentic, but manageable communicative situations.
- The language level needs to be slightly above the students’ level.
- The learners are provided with as much scaffolding as necessary to be able to successfully solve communicative situations.

According to Lightner (2013: 362), the most important factor in CLIL PE is that communication should not hinder the learning of movement, but in the best case foster it. First and foremost, communication can only be successful when both communication partners (teacher and learners) have the command of the language needed. Subsequently, sports specific language needs to be identified and systematically taught to establish the capacity to act straight from the beginning of CLIL PE (Nietsch & Vollrath 2003: 152, Rottmann 2006: 237). This includes the teaching of vocabulary, but also collocations, phrases or language chunks, the only part of language teaching that is dealt with explicitly. Different authors (Coral i Mateu 2013: 45; Devos 2013: 204-207; Menze-Sonneck & Devos 2013: 83) apply language use and communication for language learning to the three areas of the language triptych (cf. Chapter 2.4). Language of learning can be understood in the
context of CLIL PE as the technical language needed to participate in movement and sports. Language for learning is language that is necessary to talk about content on a meta-level and includes language functions, e.g. asking, answering, explaining, etc. Language through learning is language that cannot be planned by the teacher, but occurs when learners are cognitively engaged. (Menze-Sonneck & Devos 2013: 83). Nietsch & Vollrath (2003: 152-155) follow a different approach and identify four categories of language learning (vocabulary, collocations, phrases, chunks, language of learning, language for learning), which are presented in the remainder of this chapter (Table 2). Concrete approaches to enhance speaking or reading skills, which can also be fostered in CLIL PE, are not discussed by Nietsch & Vollrath (2003).

Table 2: Examples of language needed in CLIL PE (examples taken from Nietsch & Vollrath 2003: 154-155).

<table>
<thead>
<tr>
<th>Language</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing spatial orientation and movement awareness</td>
<td>• Surroundings (changing rooms, long jump pit...)</td>
</tr>
<tr>
<td></td>
<td>• Where to find equipment and where to place it (in the storage areas, along the center line, in front of the goal...)</td>
</tr>
<tr>
<td></td>
<td>• Where to meet (in the center circle, in the goal area)</td>
</tr>
<tr>
<td></td>
<td>• Directions of movement (upwards, to turn inwards, roll forward, towards...)</td>
</tr>
<tr>
<td>Giving instructions</td>
<td>• You’d better...</td>
</tr>
<tr>
<td></td>
<td>• You mustn’t...</td>
</tr>
<tr>
<td></td>
<td>• The player should...</td>
</tr>
<tr>
<td>Describing and analyzing movements</td>
<td>• Directions of movement (up, down, forward, backward, sideways...)</td>
</tr>
<tr>
<td></td>
<td>• Quality of movement (slow, fast, explosively, energetically...)</td>
</tr>
<tr>
<td></td>
<td>• Parts of the body</td>
</tr>
<tr>
<td></td>
<td>• Complex sentences: If you do a forward roll and don’t keep your chin on your chest you might hurt your head!</td>
</tr>
<tr>
<td>Developing and evaluating rules and tactics</td>
<td>• Analysis of basic game strategies, like how to score goals.</td>
</tr>
<tr>
<td></td>
<td>• Stay between the goal and attacker.</td>
</tr>
<tr>
<td></td>
<td>• Raise your arms to block the goal.</td>
</tr>
<tr>
<td></td>
<td>• Refereeing: One minute suspension for rough play</td>
</tr>
</tbody>
</table>

The first category (developing spatial orientation and movement awareness) of Table 2 needs to be developed early on because knowing these words and phrases is necessary for each PE lesson. Nietsch & Vollrath (2003: 153) recommend the use of written plans with pictures or games related to spatial orientation in the gym in the first CLIL PE lessons. Giving instructions, which is the second category, is an integral part of PE and is rather teacher focused. Subsequently, students should also be asked to explain short sequences,
formulate rules or discuss problems. Another important part of speech in PE relates to the description and analysis of movements (third category). The cognitive and linguistic demand can be very high in this category because relationships have to be analyzed and verbalized. The necessary language includes a considerable amount of vocabulary. The authors (2003: 154) reason that therefore demonstrations that are accompanied by “Do it like this!” are sometimes means to an end, especially with beginners. The area with presumably the most cognitive and linguistic parts is the fourth category of the table, namely the development and evaluation of content, rules and tactics, including refereeing. Here the use of written material may also be useful. Achtergarde’s (2013: 52) approach (cf. Chapter 3.2) of using sports commentaries offers a good language learning opportunity in this context. Oral or written reflective processes can be fostered in categories three and four and can additionally be used to initiate a change of perspective and therefore, the creation of distance from one’s own actions. For this reason an extended educational potential is reported to be inherent in those reflective processes (Lightner 2013: 364; Schmidt-Millard 2004: 320-321, Rottmann 2006: 236).

In the context of language learning in CLIL PE Devos (2013: 199) includes a word of warning. He argues that CLIL PE can lead to a negative phenomena of language learning, like the fossilization of erroneous language when students use a high amount of their mother tongue or are uncorrected over a longer period. These problems can result from the spatial and individual freedom the students have in a CLIL PE setting. Teachers need to work against such a development using strategies already reported in this chapter and the next (Chapter 4.2).
Planning in general, but also in CLIL settings needs to be taken seriously. This can also be exemplified by two different quotes. The first quote is taken from a book concerned with the subject of physical education. If this is true for PE without a CLIL approach the importance of thorough planning for CLIL PE can be inferred easily.

Wenn man nicht genau weiß, woraufhin man was und wie an welchem Ort besprechen, erörtern, auswerten, diskutieren etc. möchte, dann können sich Lehrer und Schüler auch kaum angemessen äußern und verständigen! (Klingen 2013:20).
[When a teacher does not know exactly why, how, what and where he/she wants to discuss, reason, evaluate,... then teachers and students can hardly express themselves adequately.]

Rottmann (2006: 238) highlights the importance of planning in a CLIL PE environment and comments on the view of the teacher as a role model.

Um die fremdsprachliche Kompetenz im bilingualen Sportunterricht über ihre rezeptive Komponente hinaus zu fördern, müssen fremdsprachliche Sprechanlässe geschaffen werden. In den seltensten Fällen entstehen sie von allein [...]. Welche Bedeutung die Fremdsprache [...] einnimmt und wie die verbale Kommunikation in ihm qualitativ ausgeprägt ist hängt maßgeblich von der Unterrichtsgestaltung durch die Lehrperson [...] und von ihrer Einstellung [...] ab.
[Communicative opportunities in the additional language have to be planned in order to develop language competence in CLIL PE beyond the receptive competent. This rarely happens alone. The importance of the foreign language and the place and quality of verbal communication is determined by the teachers’ planning of the lessons and from their attitude.]

Coral i Mateu (2013) follows the most comprehensive understanding of planning and specifies that CLIL PE programs need to undergo four steps of planning, namely developing a policy for CLIL, developing a work plan for CLIL PE, planning CLIL PE units and planning CLIL PE lessons. The first step aims at incorporating a CLIL PE program in a school’s policy. This can be done by distributing a detailed description of CLIL PE (purpose, nature of the instruction, management, aims, link of the PE curriculum with foreign language learning, benefits for the school’s status) to stakeholders (Coral i Mateu 2013: 44-45). The second step involves developing “a long-term plan which provides the groundwork for a PE-in-CLIL programme across an educational stage” (Coral i Mateu 2013: 45). This includes allocating CLIL PE to the curriculum of physical education. Only afterwards can a link to an integrated
program be made. Therefore, the provision of a description of equipment, materials and facilities that are required are equally important as the type and the mode of language support. Coral i Mateu (2013: 45) also suggests placing the proposal within the 4 Cs framework and describing communication with the help of the language triptych (cf. Chapter 2.4).

Coral i Mateu (2013: 48-59) then differentiates between two further steps (three and four). Here the guiding principle needs to be an integration of content and language on a more practical level. Students need to be as active as possible, hence language work that has to be done without a connection to movement (e.g. learning from vocabulary lists) cannot be the aim of CLIL PE (Nietsch & Vollrath 2003: 155-156). First, Coral i Mateu (2013: 46) talks about the planning of CLIL PE units which need to include the description of medium-term teaching aims, learning outcomes (as ‘know’, ‘be able to do’, and ‘be aware of’ statements), contents (including references to all 4Cs), assessment criteria, tools, teaching techniques and styles, strategies to differentiate, equipment, facilities and timing. Second, CLIL PE lessons with a concrete sequence of tasks with clearly defined goals (Coral i Mateu 2013: 58-59) and strategies to consolidate the knowledge, which is more difficult to achieve, need to be planned.

During the planning process (steps three and four) different materials also need to be designed. Nietsch & Vollrath (2003: 155-156) recommend using posters, videos, flashcards etc. for the introduction of content and for acquiring the necessary language. Such materials need to be adapted linguistically for CLIL PE lessons. Additionally, students should also have the opportunity to prepare content or to follow up on content and language. The author’s recommendation is the use of a teacher compiled reader, which should include the required language for different sports (e.g. vocabulary, collocations, phrases) and which should be expanded by the students (Nietsch & Vollrath 2003: 155-156). Devos (2013: 201) points out the suitability of diverse reading and writing activities (e.g. text reconstruction, fill-in exercises, taking a position etc.) for different purposes (comprehension, comprehension productions, production and creation) with increasing difficulty (lower order processing to higher order processing). The author argues further that using such reading and writing activities are vital in order to avoid fossilization. Another possibility to use materials is provided by Coral i Mateu (2013: 52), who adds that
handouts can be used for group and/or self-assessment. Furthermore, the author (ibid. 55-57) specifies materials that can be used for scaffolding, which can be described as resources to help students in understanding and completing the task at hand. Apart from physical demonstrations, the use of realia, substitution tables, visual organizers, word banks and glossaries are another possibility to enhance understanding. Nonetheless, sometimes it is difficult to organize the use of additional material for language work during lessons given the spatial conditions of PE. In Austria only some schools have a black/whiteboard or technical equipment in the gym, and hardly any next to the swimming pool or the long jump pit. E-learning platforms could also function as a possible tool to help organize all this language work and for reference.

Another central area of planning (steps three and four) that needs to be addressed in order to foster language learning relates to different organizational forms. In CLIL PE it is especially important to increase student-talking time (cf. Chapter 3.2), therefore, meaningful group work and pair work needs to be encouraged. Devos et al (2013: 13; 2012: 359) report that research in CLIL PE has shown that phases that were highly rewarding language wise occurred in self-organized pair work or group work. Devos (2013: 203) furthermore identified different language learning opportunities which result from different interaction types (cf. Table 3). Students can either support each other’s learning of content by content scaffolding, by language scaffolding or both by binary scaffolding (cf. Tührmann 2013). Additionally, this dialogic peer interaction helps students to become autonomous learners (Devos 2012: 359, 361), something Achtergarde (2007) also demands for traditional PE (Chapter 3.2). Having this knowledge is important for teachers in order to be able to incorporate activities with different foci.
Table 3: Foreign language use in CLIL PE classroom activity (Devos 2013: 203).

<table>
<thead>
<tr>
<th>Classroom Activity</th>
<th>Organization</th>
<th>Relationships</th>
<th>Language Use</th>
<th>Facilitates</th>
</tr>
</thead>
</table>
| Playing in teams during sports or games | Group work | Equal Peer | Language play, noticing, communication strategies, negotiation of meaning | • Centrifugal language use  
• Social rapport and group identity  
• Self-regulation of language use  
• Mediation through the foreign language |
| Expert-novice/novice-expert | Language scaffolding, content scaffolding, binary scaffolding | Peer teaching and learning in zone of proximal development (ZPD)\(^4\) |
| Practicing, exercising, warming-up | Pair work | Equal peer | Language play, noticing, communication strategies, negotiation of meaning | • Centrifugal language use  
• Social rapport and group identity  
• Self-regulation of language use  
• Mediation through the foreign language |
| Expert-novice/novice-expert | Language scaffolding, content scaffolding, binary scaffolding | Peer teaching and learning in ZPD |
| Inner resources | Private speech\(^5\) | • Internalization of new or developing language  
• Practice of words for social use  
• Self-evaluation, self-instruction or self-reinforcement |
| Giving instructions, introducing a new sport or game | Whole-class | Expert-novice | Negotiation of meaning | • Mediation through the foreign language |
| Inner resources | Private speech | • Internalization of new or developing language  
• Practice of words for social use  
• Self-instruction |

\(^4\) This idea comes from the sociocultural theory of learning as put forward by Vygotsky and can be understood as a metaphorical place where learning takes place through interaction due to problem solving because of a gap between the actual developmental level and the level of potential development. (Devos 2012: 363)

\(^5\) Private speech or self-talk is a strategy where students are asked to talk about their feelings and perceptions and to evaluate themselves (Devos 2013: 202).
Problems can occur in each planning step of CLIL PE. The most prominent issue in planning CLIL PE lessons is that it seems to be rather time-consuming (Hofmann & Radicke 2009: 10) because only a few lesson plans or materials are available (Rottmann 2003: 14). Apart from including meaningful communication on the right level (Rottmann 2006: 237), Schmidt-Millard (2004: 326) shows that methodical handbooks in English very often follow traditional pedagogical models and cannot be used for modern instruction of PE.

4.3 Literature on CLIL PE

Unfortunately, there is only a limited amount of literature available concerning CLIL PE, many of which have already been discussed (cf. Chapters 4.1, 4.2). In the remainder of this chapter the literature, which can be further subdivided into three groups, namely practical examples, short theoretical considerations and longer theoretical and empirical research, are briefly discussed.

First, often coming from the subject of PE there are mostly journal articles which provide practical examples/lesson plans often written by English and PE teachers (see Table 4). The focus within the 4Cs framework can mostly be seen on the integration of culture. Language work or communication as a topic for development is often not mentioned explicitly, with the exception of the provision of vocabulary lists and language chunks.

Table 4: Lesson plans on CLIL PE

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Content of lesson plan(s)</th>
<th>Explicit focus of the lesson(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trömmel (2006)</td>
<td>Flag football</td>
<td>content, lexis, reading (of worksheets), discussions, planning of moves</td>
</tr>
<tr>
<td>Kittsteiner &amp; Neumann (2001)</td>
<td>Beach volleyball</td>
<td>content, culture, technical-vocabulary/phrases</td>
</tr>
<tr>
<td>Volckart (2013)</td>
<td>Hip Hop</td>
<td>vocabulary and chunks (receptive, reproductive) through dancing (content) and music</td>
</tr>
<tr>
<td>Kretschmann &amp; Arnold (2012)</td>
<td>Basic lexis: ballgames</td>
<td>vocabulary only</td>
</tr>
<tr>
<td>Devos, Wald-Dasey &amp; Menze-Sonneck (2013)</td>
<td>Baseball</td>
<td>14 lessons; development of language of, for and through learning; additional: evaluation of the sequences theoretical considerations</td>
</tr>
<tr>
<td>Devos &amp; Menze-Sonneck (2013)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rettenmaier (2015)</td>
<td>Ultimate frisbee</td>
<td>content, culture, vocabulary</td>
</tr>
</tbody>
</table>
There are then rather short publications that relate to one or more theoretical aspects of CLIL PE. Hofmann & Sinning (2006: 8), for example focus on American sports and the American culture as possible access points to an integrated learning.

The final and rather small group refers to research that tries to uncover certain aspects of CLIL PE to develop it further. Rottmann (2007: 205) summarizes that “[t]heory-based studies or empirical data supporting the teachers’ efforts are lacking. This deficit calls for theoretical elaboration, empirical research and, based on both, standard methods for applying CLIL in PE”. Apart from some diploma theses only a few attempts at research have been made, which will briefly be presented in the following section. To begin with, Nietsch & Vollrath (2003) and Schmidt-Millard (2004) try to reason for CLIL PE in the context of educational theory. Coral i Mateu’s focus (2012a, 2012b, 2013) lies on the development of CLIL PE programs. He describes the stages of the implementation from a policy for integrated learning, to a work plan for CLIL PE programs, to CLIL PE units and CLIL PE lessons and offers practical guidelines. To achieve integrated learning he connects his proposals with the 4Cs framework. Additionally, he provides his readers with practical examples of an introductory activity (2013: 57), a substitution table (2013: 56), pictures for scaffolding (2013: 55, 57) and an example lesson plan (2012b). Coral i Mateu & Lleixà (2014) conducted a qualitative study and try to answer two research questions. First, they wanted to identify which teaching strategies improve oral communication. In this respect the results show that different organization formats of groups (whole group motor cooperative games, team sports, small group activities, motor peer teaching) can be used as well as different types of scaffolding. Secondly, the authors aim to describe meaningful development of oracy. Coral i Mateu & Lleixà (2014: 17) report that CLIL PE fosters spontaneous face-to-face interaction. Additionally, students show an increased self-confidence in using the foreign language spontaneously. In their summary, the authors (2014:18) recommend six teaching strategies:

- Students should be encouraged to explain games in an orderly sequence.
- Practical knowledge should be discussed during rest phases.
- Long explanations should be avoided. Instead complex games can be divided into simpler progressive activities.
- Students should referee and justify their decisions.
• Language work needs to be incorporated into the tasks, in a way that activities are not slowed down.
• Incorporate scaffolding tools, such as matching tasks, activities that use flashcards or realia, substitution tables etc.

Two German doctoral dissertations and related articles are concerned with the concept of CLIL PE. Rottmann (2006) tries to build a theory for possible links of PE and the foreign language in CLIL PE. In the empirical part she focuses on students’ performances during discrete situations which she analyzes for integrated learning opportunities, their triggers and the potential of CLIL PE to enhance language and content. Furthermore, Rottmann also published journal articles concerning this topic for a wider readership (Rottmann 2005, 2007). Unfortunately, Devos’ dissertation (2013) has not yet been published and I can only present information from two chapters which were kindly provided by the author. The author (2013: 97) seeks to explore foreign language use in peer interactions. To be more precise, Devos (ibid.) wants to identify phenomena of language use and their extent. Furthermore, he is interested in conversational patterns occurring in those phenomena. He also seeks to answer why students communicate as they do to fulfill social and learning aims. Therefore, Devos (2013) too analyzed discrete situations using audio and video recorded CLIL PE lessons complemented by a questionnaire and semi-structured interviews. The main finding is that learners can use and actually do use the CLIL language in order to interact, which leads to language and content learning through social learning in CLIL PE (Devos 2013: 195). Devos (2013: 199) formulates the following hypothesis:

    The CLIL PE setting is an environment rich with various social interactions [...] created by the individual and spatial freedom of the setting. These interactions consequently provide affordances which allow learner to use the foreign language during peer interactions in ways which facilitate their foreign language and content learning.

Devos (2012) also analyzed three different forms of scaffolding (langue scaffolding, content scaffolding and binary scaffolding) in student interaction and concludes that “if learners are given the opportunity to interact and collaborate on CLIL PE tasks, they can and do scaffold each other’s learning to construct an understanding about both content and language knowledge” (Devos 2012: 377).
To sum up, only some theoretical work and research has been done with regard to CLIL PE though all authors who researched this area consider PE a suitable subject for CLIL provision. The suitability of PE for CLIL is also reflected upon in the beginning of this chapter (cf. Chapter 4.1) which deals with aims of CLIL PE. Aims in all 4Cs of the framework, namely culture, content, communication and cognition can be addressed in CLIL PE. Culture can be seen either from the perspective of sports that are rooted in Anglo-American practices or from discussing underlying cultural values like fair play etc. Furthermore, CLIL PE can provide students with real speech opportunities and fosters language for, of and through learning. In particular vocabulary, phrases and chunks can be taught through instructions, descriptions, analysis and evaluation of movement as well as the development of rules and tactics. To ensure a high quality of learning in CLIL PE, planning is of utmost importance, but it very often proves to be time-consuming because only few materials are available.
5 Teacher beliefs

The term ‘belief’ is easily understandable and readily used in day-to-day conversation. As a subject of research teachers’ beliefs have developed from the 1940’s onwards with an increased interest over the last 20 years. Unfortunately, as a concept for academic research defining beliefs is more difficult. Pajares (1992: 307), for example, clarifies that “[t]he difficulty in studying teachers’ beliefs has been caused by definitional problems, poor conceptualizations, and differing understandings of beliefs and belief structures”. Skott (2015b: 5) observes that because of these problems and a varying view on the concept of teachers’ beliefs there are two different approaches to defining beliefs: Some researchers try to discuss the concept in detail while others define it implicitly for their studies. Skott (2015a: 18) argues that this implicit description shows that “there is sufficient consensus about a core of the concept for continued research to make sense”. This chapter aims to present common findings from research to define and conceptualize this broad and commonly used notion for this diploma thesis.

5.1 Definition of Teachers’ Beliefs

A milestone in the research of teachers’ beliefs and a step towards a common conceptualization is Pajares’ (1992) seminal paper. His (1992: 329) aim is to shed light on the concept of teachers’ beliefs and to provide a basis for research on this “single most important construct in educational research”. A major problem for many researchers is the synonymous use of other terms like attitudes, values, opinions (Pajares 1992: 309), assumption, conceptions, personal theories (Tsui 2003: 61), principles of practice, personal epistemologies, perspectives, practical knowledge, orientations (Kagan 1992: 66). Hattie (2015: 90) even reports that different terms are used in different countries, like beliefs in Australia, epistemology in the USA, or conceptions in Europe. Other authors, for example Borg (2003: 81), in turn follow a more integrative approach. He talks about teacher cognition and researches “what language teachers think, know, believe and do”.

In contrast to Pajares (1992) and others who report the difficulty of defining the term teachers’ beliefs Fives & Buehl (2012: 472-473) argue that the difficulty does not lie in defining teachers’ beliefs because “several authors have done so”. According to them it is rather problematic “getting authors to consistently define and use terms within and across
fields that examine these constructs” because of the complexity of the field (Fives & Buehl 2012: 473). To underline their statement they exemplify it with a table of definitions and the inconsistencies that can be found across the literature.

Table 5: Defining teacher beliefs (Fives & Buehl 2012: 473)

<table>
<thead>
<tr>
<th>Definition</th>
<th>Inconsistencies in definitions of beliefs</th>
</tr>
</thead>
<tbody>
<tr>
<td>“The term belief [...] is derived from Green (1971) and describes a proposition that is accepted as true by the individual holding the belief. It is a psychological concept and differs from knowledge, which implies an epistemological warrant.” (Richardson 1996: 104)</td>
<td>Implicit or explicit</td>
</tr>
<tr>
<td>“[B]eliefs are understood to be a set of interrelated notions [...]. Educational beliefs are a substructure of the total belief system and must be understood in terms of their connections to other, perhaps more influential, beliefs. Most belief systems are formed early and changes in belief systems during adulthood are difficult and thus rare”. (McAlpine et al. 1996: 392)</td>
<td>Stable</td>
</tr>
<tr>
<td>“Teacher belief is a particularly provocative form of personal knowledge that is generally defined as pre- or in service teachers’ implicit assumptions about students, learning, classrooms, and the subject matter to be taught. [...] [T]eachers’ beliefs appear to be relatively stable and resistant to change [...]” (Kagan 1992: 65-66)</td>
<td>Implicit</td>
</tr>
<tr>
<td>“Belief systems are dynamic, permeable mental structures, susceptible to change in light of experience. [...] The relationship between beliefs and practice is a dialectic, not a simple cause-and-effect relationship”. (Thompson 1992: 140)</td>
<td>Dynamic</td>
</tr>
<tr>
<td>“[...] an individual’s judgment of the truth or falsity of a proposition [...]”. (Pajares 1992: 316)</td>
<td>Stable</td>
</tr>
<tr>
<td>“[...] teacher beliefs can be represented as a set of conceptual representations which store general knowledge of objects, people and events, and their characteristic relationships [...]”. (Hermans et al. 2006: 128)</td>
<td>Stable</td>
</tr>
</tbody>
</table>
The first category in Table 5 focuses on the nature of beliefs. Implicit means that teachers are unaware of their beliefs and explicit means that teachers are conscious of them. Fives & Buehl (2012: 473-474) review over 600 articles and state that the nature of beliefs is often not addressed. When it is, the common perspective is an implicit view on teachers’ beliefs. Nonetheless, the authors argue against this implicit view on teacher beliefs because it signifies that beliefs direct how teachers behave and filter how they perceive their work. Fives & Buehl (2012: 474) themselves take a more flexible approach viewing some beliefs as explicit whereas others remain unknown.

The second category in Table 5 refers to the stability of beliefs. Fives & Buehl (2012: 474-475) describe two contrasting views along a continuum. Some researchers see beliefs as something stable, unable to be changed, whereas others view them as dynamic. Both understandings are based on research findings and have influenced research and practice in equal measure. Fives & Buehl (2012: 475) conclude that “it seems evident that specific beliefs may be considered on a continuum with long-held, deeply integrated beliefs at the most stable end and new, more isolated beliefs at the most unstable end.” The authors report that teachers hold both general and specific beliefs about topics. Which of them are activated depends on the context.

Fives & Buehl (2012: 475) add to this category of stability the related consideration whether beliefs can be seen as situated in certain contexts or generalizable across different situations. These two categories are related insofar as both of them question whether beliefs are changeable; at the same time, they differ because this second category seeks to answer to what degree teacher beliefs are consistent or vary. The authors argue (ibid. 476) that “beliefs are held by individual teachers and stay with them as they move in and out of different situations […] and that […] different situations or contexts may activate specific beliefs that influence the teachers’ understanding and actions”.

Another recurring theme in the research of beliefs, namely the distinction of beliefs and knowledge, is shown as the third category in Table 5. Pajares (1992: 309) even argues that most of the confusion about beliefs stems from the unclear distinction between beliefs and knowledge. He (1992: 315) explains different perspectives on beliefs and knowledge with the fact that they reflect general agreements among researchers and “paradigmatic assumptions they represent rather than […] a basic and incontrovertible truth inherent in
the constructs.” Additionally, Pajares (1992: 309-311) reviews three different opinions from researchers who regard beliefs and knowledge as not easily distinguishable, such as Nespor (1987), Nisbett & Ross (1980) or Ernest (1989). Nespor (1987), for example, ascribes stronger affective and evaluative components to beliefs than to knowledge. Nisbett & Ross (1980) base their distinction on the theory that generic knowledge comprises a cognitive component and a belief component and subsequently they view beliefs as kind of knowledge. Ernest (1989) regards knowledge as the cognitive outcome of thought and belief as the affective outcome with a cognitive component. Pajares also identifies researchers for whom beliefs and knowledge are even the same (e.g. Lewis 1990). Murphy and Mason (2006: 306-307) also review the relationship between knowledge and beliefs and view them as overlapping constructs. For these authors knowledge can be verified externally, is accepted to be true and can be confirmed by others, whereas beliefs do not need to or even cannot be verified. Additionally, a belief is accepted or wanted to be true by the holder and is ascribed importance. Levin (2015: 49) summarizes current research which acknowledges “that teachers’ beliefs and teacher knowledge are closely related, especially the practical knowledge that guides their behaviors.”

The last category in Table 5 relates to the question whether beliefs are organized in a system or remain something individual. Fives & Buehl (2012: 477) summarize that convincing evidence describes teachers’ beliefs as a system. Each individual has his/her own belief system including all beliefs. This belief system helps individuals to understand their surroundings and define who they are. Within the belief system beliefs are organized hierarchically (Pajares 1992, Fives & Buehl 2012, Skott 2015a, 18). Pajares (1992: 325) concludes that the interpretation of educational beliefs or other belief structures has to take into account the connections among them as well as those to more important attitudes and values. These educational beliefs are referred to when researchers talk about teachers’ beliefs, however he clarifies that teachers have beliefs about different constructs, like politics, art etc., which Rokeach (1972) calls attitudes. Furthermore, the construct of teacher beliefs in itself is very broad and includes many sub-categories, e.g. teacher efficacy, epistemological beliefs, self-concept and self-esteem.

An agreement on a definition is yet to be reached, however, according to Skott (2015a: 18-19), there is a core of four common characteristics of beliefs across the literature. First, the
term belief is used for subjective, individual mental constructs. Second, beliefs consist of affective and cognitive aspects or that these aspects are “viewed as inextricably linked, even if considered distinct” (ibid. 18). Third, beliefs are considered to be rather stable, changing only under specific conditions. Fourth, beliefs are reported to influence teaching significantly, specifically in the way teachers interpret and deal with issues arising from the practice.

To sum up, defining teacher beliefs is a difficult undertaking. Borg (2011: 186) reviews the concept of beliefs briefly and gives an agreed-upon definition that “a belief is a proposition which may be consciously or unconsciously held, is evaluative in that it is accepted as true by the individual, and is therefore imbued with emotive commitment; further, it serves as a guide to thought and behaviour”, which is the definition also used in this paper.

5.2 Development and Change of Teacher Beliefs

Pajares (1992: 314-316) states agreement among researchers that beliefs develop due to social construction and enculturation. Teacher beliefs, however, are ascribed a special position when it comes to their development. To explain this, the author (1992: 323) points out that unlike medical or law students

[p]reservice teachers are insiders. They need not redefine their situation. The classrooms of colleges of education, and the people and practices in them, differ little from classrooms and people they have known for years. Thus, the reality of their everyday lives may continue largely unaffected by higher education, as may their beliefs. For insiders, changing conceptions is taxing and potentially threatening. These students have commitment to prior beliefs, and efforts to accommodate new information and adjust existing beliefs can be nearly impossible.

Richardson (2001), lists three experiences that contribute to the development of beliefs, namely experiences with schooling, with formal knowledge and with personal experiences. In these areas research continues, as Woolfolk-Hoy et al. (2006: 717) point out in their review. Nonetheless, Levin (2015: 49) cautions that there is not much research available dealing explicitly with the development of teachers’ beliefs, and therefore “any claims about the development of teachers’ beliefs should be considered carefully with regard to both the timeframe of the research and types of beliefs being studied” (Levin 2015: 59).
Bovellan (2014: 55) researches internal and external factors influencing the development of teacher beliefs and incorporates all factors into a model (Figure 4). The circles comprise eight white and one grey field and illustrate factors that influence teachers’ beliefs. Similar to others (e.g. Pajares 1992: 323-324, Richardson 2003: 5) the author also highlights the significance of one’s experiences of learning, as it is indicated in grey. The factors that may account for changing teachers’ beliefs are indicated by bolts and will be discussed in greater detail in the following chapters.

![Figure 4: Factors which influence teacher beliefs (Bovellan 2014: 55)](image)

In regard to pre- and in-service teacher belief change, Fives & Buehl (2012: 484-486) suggest that the relevant literature can be subdivided into three research areas: a.) developmental changes of beliefs in a specific period of time, b.) belief changes of pre-service teachers, mostly during their training, and c.) belief changes of in-service teachers.

One finding across the studies Fives & Buehl (2012: 484-486) analyzed pertains to the impact of teacher education on pre-service teacher beliefs. They emphasize the importance of reflection for the latter in order to learn to understand their beliefs, though often these reflections are part of the curriculum and are supervised. Therefore, the authors question to what extent these conditions are reflected in the students’ answers. Borg (2011: 371) also reviews research on belief change of pre-service language teachers due to teacher education. He reports mixed findings, ranging from belief stability to
change. Borg ascribes the difference to the variations of teacher education programs examined and the research approaches.

Another finding across the body of research is that pre- and in-services teachers may change their beliefs during their career and often as a result of particular experiences (Fives & Buehl 2012: 486). However, the degree of change is determined by a number of factors, for example which beliefs are in question, the duration and the kind of experience, individual factors as well as the context. Skott (2015a: 18) also describes beliefs as relatively stable constructs that change only under “substantial engagement in relevant social practices”. Therefore, he (ibid. 2015a: 19) shifts the focus onto personally meaningful experiences and away from the duration of those. In practice changes can be caused by teachers’ personal lives, experience during their own career as students, during their teacher education or in exchange with their colleagues. However, stability of beliefs means that changing them is difficult and often involves long-term processes. This does not correlate with the naïve beliefs of many researchers, teacher educators, or policy makers, who think that beliefs can be changed with short-term experiences (Ashton 2015: 43; Skott 2015a: 22). Richardson & Placier (2001: 921), for example, conclude that “long term collaborative, and inquiry oriented programs with in-service teachers appear to be quite successful in changing beliefs, conception, and practices”. The authors describe further that the collaboration with peers in so-called communities of practice, which focus on the development of teaching and learning, can result in a positive change of beliefs and practices. Levin (2015: 49) summarizes more potential influences on beliefs, namely social encounters, culture, politics and historical contexts that teachers encounter during their career. No matter how readily beliefs can be changed, it is nonetheless important for mentors, school administrators and those working in teacher development to understand the “content and sources of teachers’ beliefs [...] because teachers’ beliefs guide decisions they make and influence their subsequent judgments and actions in classroom” (Levin 2015: 50).
5.3 Functions of Teachers’ Beliefs

The preceding three sections describe characteristics of teachers’ beliefs and how they may develop and change. However, the question of why teachers’ beliefs are important is not yet addressed. Every teacher holds beliefs about teaching, learning, their students, subject matters and their roles as teachers (Pajares 1992: 314) and those beliefs subsequently influence the teacher’s performance (Levin 2015: 49). To be more specific, teachers’ beliefs are deemed vital because they fulfill three functions - as filters for interpretation, frames to conceptualize problems and guides for actions (Figure 5), as Fives & Buehl (2012: 478-479) found from their review.

![Diagram: Three functions of beliefs](Fives & Buehl 2012: 478)

First of all, beliefs act as filters and thus influence how something is perceived and interpreted. After this step is completed beliefs act as frames to define problems before functioning as guides for following actions. The figure additionally shows how beliefs relate to practice and gives potential examples for each function. Tsui (2003: 61) elaborates that beliefs help teachers to succeed in understanding the classroom in its complexity and multidimensionality, with decision making and to shape their self-perceptions. Fives & Buehl (2012: 480) also stress that “different types of beliefs may serve different functions in different situations”. Regardless of the results gained in their review, they caution that more research is needed concerning the function of beliefs. No matter how beliefs function exactly, it is quite clear that teachers’ beliefs have some influence on the practice. This will be discussed in the next section.
5.4 Teachers’ Beliefs and Practice

The relationship between teacher beliefs and teaching practice is a much researched area within the field of teacher beliefs. The following subchapters will first present the kinds of relationship beliefs and practices are reported to have, and subsequently factors that foster or hinder the enactment of beliefs are discussed.

Beliefs are reported to be the “explanatory principle for practice” (Skott 2015a: 21). This does not necessarily mean that once a teacher has certain beliefs they are enacted automatically. There are also as many studies that suggest beliefs as non-consistent with practice (Fives & Buehl 2012: 480-481). To gain more information about the possible relationships between teachers’ beliefs and practices Buehl & Beck (2015: 66-73) reviewed over 250 articles. They identified four different perspectives on the belief-practice relationship: beliefs influence practice; practice influences beliefs; teachers’ beliefs are disconnected from their practice; and a reciprocal and complex relationship. The authors (2015: 70-71) favor the latter approach because beliefs and practice influence each other, but the intensity of this relationship may be different for individuals, among contexts and the type of practice and beliefs in question. They specify that in relation to the first two perspectives there was never a perfectly clear congruence or in the case of the third perspective a complete lack of a relationship. Fives & Buehl’s (2012: 481) argument heads in the same direction: “[…] it is not a matter of whether beliefs and practice are or are not congruent but rather the degree of congruence or incongruence between beliefs and practice”. Therefore, Buehl & Beck (2015: 71) reason that further research should try to understand the relationship of beliefs and practices and their variations and to analyze the consequences of a congruence or incongruence. Researchers also try to explain the reported incongruence between beliefs and practice. Some authors make methodological issues responsible (Fives & Buehl 2012: 481; Basturkmen 2012, Skott 2015a: 21). Buehl & Beck (2015: 71-73) name two other possible reasons why beliefs and practices are incongruent. First, they report that more experienced teachers tend to work more in accordance with their beliefs - that is, practice and beliefs become more congruent with experience. Second, the relationship between beliefs and practice can vary, depending on the kind of beliefs in question, their position within the belief system and their functions.
Additionally, a range of other factors were identified that hinder or support the enactment of beliefs.

The congruence or incongruence between espoused and enacted beliefs is explained with the existence of various factors. In the literature (e.g. Basturkmen 2012, Buehl & Beck 2015, Fives & Buehl 2012) a distinction between internal and external factors is made (Figure 6).

![Diagram showing internal and external factors in the enactment of beliefs](image)

**Figure 6: Internal and external factors in the enactment of beliefs (Buehl & Beck 2015: 74)**

Internal factors comprise other beliefs, knowledge, experience, the level of awareness or self-reflection a teacher exhibits. External factors relate to the classroom, school policy and reach even further to a district or national level.

### 5.5 Research Methodology on Beliefs

Similar to defining and conceptualizing beliefs it is not an easy undertaking to research them. Generally, there is a vast collection, or a “riotous array of empirical research” (Kagan 1992: 66) concerning various aspects of teachers’ beliefs. Furthermore, Fives & Buehl (2012: 471) claim that the impact of research that seeks to explain and predict teacher beliefs is limited because there is a lack of cohesion and clear-cut definitions (cf. Chapter 5.1). The question how to operationalize beliefs in research and how to overcome methodological difficulties is asked (e.g. Skott 2015a: 20). This leads to a discussion about the most suitable method for researching beliefs.
For some authors, the distinguishing criteria is whether the data analysis is of a quantitative or qualitative nature. Questionnaires, mostly quantitative, are utilized across many studies, however, this is not unchallenged (e.g. Adb-El-Khalick & Lederman 2000: 674). Skott (2015a: 20), for example, criticizes the use of short-answer, standardized instruments for two reasons. First, items of such standardized instruments work under the premise that they have a similar meaning for researchers and teachers. Second, responses need to be sufficiently transparent for the researcher in order to be able to interpret them meaningfully. If any of those conditions do not apply, the researcher cannot infer teacher beliefs from those research instruments. Additionally, there is the danger that “standardized instruments may impose a set of beliefs on the participants rather than elicit their own” (ibid.). In view of these difficulties Adb-El-Khalick and Lederman (2000: 674) suggest using qualitative interviews instead.

To bring more clarity to the kind of qualitative studies used for enquiring into teachers’ beliefs Olafson et al. (2015: 128-149) classify 112 articles and their qualitative approaches. They found case studies (observation, interviews, written documents), phenomenology (interviews), grounded theory (interviews, open ended questionnaires, observation, written documents), narrative research and action research among those reviewed qualitative studies. However, more than half of the studies were classified in a ‘general category’, using qualitative methodology to collect data without specifying the approach. Generally, many of the analyzed studies used a multi-method approach to collect data or included quantitative components as well. Olafsen et al. (2015: 145) declare that they encourage the usage of qualitative studies for researching teacher beliefs. However, they insist that qualitative studies very often lack a clear research design and transparency in the description of the data collection methods as well as in the analysis of data. Hence their main recommendations are to improve the aforementioned factors and to establish peer-reviewing of the methodology prior to a study.

For other researchers, the most prominent aspect in the research of beliefs is whether beliefs can be measured with direct or indirect methods. Skott (2015a: 20) refers to researchers who criticize direct research instruments because they view beliefs as elusive concepts that can neither be directly observed nor found in interviews. Pajares (1992: 314) for example says that “beliefs cannot be directly observed or measured but must be
inferred from what people say, intend, and do” and Kagan (1992: 66) follows the same lead stating that “beliefs cannot be inferred directly from teacher behavior, because teachers can follow similar practices for very different reasons”. Therefore, some researchers (e.g. Kagan 1992: 66, Skott 2009) suggest the use of methods that require teachers to think and talk about classroom processes in order to explore what they think of their practices, to use concept maps or to use teachers’ metaphors to study their beliefs.

For Fives & Buehl (2012: 474) the choice of method stems from seeing beliefs as implicit (unconscious) or explicit (conscious). Researchers who view beliefs as explicit use a direct approach, like interviews or questionnaires. In addition to the critique of the methods presented above the authors specify that teachers answer what they think is desired and may not differentiate clearly between beliefs. Moreover, teachers may not articulate their beliefs properly or may even be unaware of their beliefs. Another indirect approach in studying teachers’ beliefs is to analyze teachers’ enacted beliefs, using methods like observation, analysis of planned actions or talk. These proceedings are criticized because researchers’ perspectives or biases might influence which beliefs are attributed to the participants. Fives and Buhl describe a third approach, namely the usage of teachers’ metaphors for teaching, which is also reliant on the researchers’ interpretation. Mahlios et al. (2010: 49-50) explain that metaphorical images can be seen as potent conceptual devices to understand how teachers conceptualize themselves as teachers and their work and how this influences teaching. Teacher beliefs are then derived from those metaphors and their relationship. Generally, Fives & Buehl (2012: 474) question researchers that view beliefs as “unconscious guides in teacher’s practice [because] how can they be assessed meaningfully without exposing them to the teachers, and once that is done, what becomes of these implicit beliefs?”. Therefore, these two researchers state that teachers hold both, implicit and explicit beliefs, and unconscious beliefs can be made explicit.

Yet another possibility in the research of beliefs is to widen the scope of research and use triangulation. Skott (2015a: 20) suggests that the researcher needs to “infer or attribute beliefs to research participants based on different types of data. Verbal accounts complement, elaborate on, or specify inferences made from classroom observations in order to piece together an image of teachers’ beliefs.” The underlying assumption is that triangulation is possible because of the relative stability of teacher beliefs across different
contexts. However, this method, according to Skott (2015a: 20-21) has also been criticized for two reasons. First, in triangulation beliefs are expected to be stable across contexts, however, this is not warranted. Second, answers to research questions that deal with the extent to which teachers’ beliefs have an impact on their practice are seen as problematic because it can be seen as a circular argument.

To sum up, many approaches are used and simultaneously criticized and there is no agreement on the use of methods. One common demand across the literature is the strong call for a clear conceptualization and a consistent use of methods to “move the field forward in a meaningful way” (Fives & Buehl 2012: 489). Pajares (1992: 329) already called for systematic, larger and representative studies and many followed. Basturkmen (2012) postulates further large studies and Woolfolk et al. (2006: 730) demand “designs and methodologies that enable us to address the ‘whole’ of teachers’ mental lives” rather than studying them “in relative isolation”.

### 5.6 Teachers Beliefs on CLIL

Dalton-Puffer & Smit (2013: 548-549) argue that stakeholders’ beliefs, namely of students, teachers and parents, are important to know because “social changes are intricately linked to how they are constructed by those concerned” (ibid. 548). Unfortunately, the number of studies of teacher beliefs on CLIL is small (cf. Lasagabaster & Sierra 2009; Lasagabaster 2009; Hüttner et al 2013; Dafouz et al. 2007; Pena Díaz & Porto Requejo 2008; Massler 2012). Therefore, Hüttner et al. (2013: 272) describe a “[gap] in the current research into CLIL”. One common finding across those studies is that respondents generally seem to have a positive view of various aspects of CLIL (Dalton-Puffer & Smit 2013: 549). However, such surveys need to be interpreted in their special contexts and generalizations can hardly or even not be drawn. The authors also point out that research on stakeholders’ beliefs of CLIL has to face a special dilemma. On the one hand, CLIL is propagated as a non-elitist way to language learning, yet children attending CLIL classes are usually more gifted or have parents showing interest in (language) education. This might be one reason for the positive results (Dalton-Puffer & Smit 2013: 549).

With regard to teacher beliefs Bovellan (2014: 54) reasons that CLIL lessons are still relatively rare in comparison to traditional foreign language lessons. Therefore, teachers
might begin their careers as CLIL teachers with beliefs on language and learning in CLIL that turn out to be partially or fully wrong and need to be modified later. Hüttner et al. (2013: 271) argue along the same line in their study. The authors say that only a limited number of students have received CLIL education in Austria, which is represented in their study. Therefore, “the practice of CLIL is thus exclusively guided by experiential criteria and beliefs of the individuals involved” (ibid.). Research on more specific aspects of CLIL teachers’ beliefs, e.g. PE teacher beliefs is missing, but will be addressed in the practical part of the paper at hand.
PART II: EMPIRICAL STUDY

This section of this diploma thesis is dedicated to the empirical study. The first main chapter (Chapter 6) lays the methodological basis for the survey. The first sub-chapter briefly argues for and explains the choice of the research instrument, namely semi-structured interviews and describes the interview guide. This is followed by descriptions of the processes of data collection, transcription and analysis. Finally, the interviewees are presented in detail. The second main chapter (Chapter 7) seeks answers to the research questions. Pre- and in-service teacher beliefs about CLIL PE are described. A discussion of similarities and differences between the two groups is integrated within each subchapter. The conclusion at the end of this empirical section (Chapter 8) summarizes the most important findings that arose from the diploma thesis.

6 Research Methodology

6.1 Research Instrument – Semi-structured Interview

6.1.1 Considerations about the Research Instrument

This research project follows the recommendation of Olafsen et al. (2015: 145) concerning belief studies (cf. Chapter 5.5) and uses a qualitative study with a clear research design. Thus, the instrument for this project is a semi-structured qualitative interview, also in accordance with Dalton-Puffer and Smit’s (2013: 550) recommendation. In qualitative research, semi-structured qualitative interviews are widely used practices. However, Friebertshäuser (2003: 371) cautions that there are also limits to this practice, namely, interviewers can influence participants through nonverbal or verbal reactions to answers, misunderstandings, the desirability of certain answers or a difference between espoused and enacted statements. Flick (2009: 150) summarizes the reason for their preference: Researchers expect “[...] that the interviewed subjects’ viewpoints are more likely to be expressed in an openly designed interview situation than in a standardized interview or questionnaire”. Characteristic for this form of inquiry is the use of an interview guide comprising open questions. It allows the interviewer to focus on the content and prepare questions on the relevant topic areas, which demands a good knowledge of the topic at hand (Friebertshäuser 2003: 375). Basic to this kind of interview is that the interview guide can be used flexibly in contrast to inputs of standardized interviews or questionnaires.
which follow a fixed order and therefore, restrict the subjects’ answers. However, difficulty arises from two opposing positions which the interviewer has to combine. They need to mediate between the input in the form of the interview guide and the research questions on the one hand and the interviewee’s style of answering the questions on the other hand. Therefore, the interviewer needs to decide in situ when and in which order to ask the questions. They also need to decide on when to ask further questions or lead the interviewee back. All these aspects can be subsumed under permanent mediation between the actual interview and the guide (Flick 2009: 170-171). Friebertshäuser (2003: 376-377) elaborates that further questions can also be prepared in advance and lead to a certain level of standardization and allows higher comparability among the interviews. These further questions, however, contain a source of danger in the form of leading questions which include the interviewers’ expectations. Additionally, there might be two other sources of problems with semi-structured interviews. First, an interview is shortened if the interviewer simply ticks off the questions without being open to let the interviewee elaborate. Second, the interviewer might use strategies to block answers.

6.1.2 Description of the Interview Guide

At the beginning of the interview (cf. the interview guide in the appendix) the participants were informed that the interview is used for the empirical part of this diploma thesis and that it is recorded. Furthermore, the interviewees learn that the data are analyzed anonymously and that questions ask about personal experiences, and that therefore answers are neither right nor wrong.

The first short questionnaire serves to survey statistical data (age, education, foreign language skills) from the interviewees. After this the interview guide can be subdivided into four categories. The first questions aim to establish the general meaning of CLIL for the teachers. The interviewees are invited to discuss their personal experiences with CLIL during their own schooling, their studies, further education or their routines as teachers. In the second part of the interview the participants are asked to elaborate on their understanding of language and communication in PE. More specifically, the interviewees answer questions about the role language and communication plays in their teaching and possible differences between lower and upper secondary classes. Additionally, they are invited to reflect on language and communication as a topic during their own education.
These three questions establish the basis for part three which asks for opinions about CLIL PE. In this sequence the teachers are invited to imagine CLIL PE lessons. Subsequently, they are asked to explain why PE might be suitable for CLIL provision and where they see potential to develop a language and intercultural competence. Additionally, the interviewees are invited to express their concerns.

The fourth part focuses on the teachers’ personal motivation. The interviewees consider how desirable it is for them to teach CLIL PE and how well they feel equipped to do so. Additionally, they are asked about further education. To close the interview the teachers are asked if there is anything remaining that they want to say about CLIL or CLIL PE.

### 6.2 Data Collection

The data was collected using the semi-structured interview presented in the previous chapter between 26.02.2016 and 04.04.2016 in the office hours at the teachers’ respective schools. The reasoning behind this is as Lamnek (1995: 95) specifies, familiar surroundings help to establish a positive atmosphere for the interviewees. Additionally, using their professional surrounding is reported to help the interviewees to open up because they feel like experts. The language of conduct was German because it is the mother tongue of the teachers as well as the language used in Austria’s school system and reduces the probability of misunderstandings or incomplete answers.

### 6.3 Transcription and Data Analysis

On the basis of the recording each interview is transcribed, which is seen as the “graphic representation of selective aspects of speaking and of one or more persons’ behavior and setting concomitant with speaking” (O’Connell & Kowal 2009: 240). The transcription of a spoken discourse includes four different elements. First of all, the verbal component needs encoding. Traditionally four models of noting this component are distinguished, namely standard orthography, which means that spelling follows that in a standard dictionary, literary transcription, eye dialect and phonetic description, whereupon the first model is the most frequently used (O’Connell & Kowal 2009, 242-244). The prosodic component is the second element that is encoded and covers emphasis and stress in utterances. It is usually transcribed by discrete graphic units. The paralinguistic component is the third element that is transcribed and it includes vocal features which are not linguistic, like
crying, laughing, aspiration, sighing or breathing. The last element includes extra-linguistic features, e.g. nodding, the sound of the mobile phone etc. (O’Connell & Kowal 2009, 242-244).

In order to do the actual transcription many different systems are available. Kuckartz et al. (2008: 27) specify that the choice of the transcription system depends on the research questions and the data required. The transcripts of the interviews in this study follow the standard orthography as the representation of dialect is not relevant for the results of this study. The transcription rules which are presented in Table 6 are oriented on the systems of Lamnek (2010) and Kuckartz et al. (2008).

Table 6: Transcription rules.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>[</td>
<td>overlapping speech (exact starting point of the second person talking)</td>
</tr>
<tr>
<td>(...)</td>
<td>short pauses (up to 3 sec.)</td>
</tr>
<tr>
<td>(30s)</td>
<td>very long pauses (&gt; 3 sec.) with the duration</td>
</tr>
<tr>
<td>example</td>
<td>emphasis</td>
</tr>
<tr>
<td>EXAMPLE</td>
<td>increase of the volume</td>
</tr>
<tr>
<td>(example)</td>
<td>uncertain transcriptions including the best guess</td>
</tr>
<tr>
<td>((laughing))</td>
<td>nonverbal expressions</td>
</tr>
<tr>
<td>[mobile phone rings]</td>
<td>independent events</td>
</tr>
<tr>
<td>::::::</td>
<td>prolongation of an utterance</td>
</tr>
</tbody>
</table>

The interviews were analyzed after the transcription using the Qualitative Content Analysis after Mayring (2014) with the help of the QCAmap Software (www.qcamap.org). The categories were found by applying one form of ‘reduction’, namely ‘summarizing’, which signifies that categories are formulated step-by-step (cf. Figure 7) while working through the interviews. At the end, each research question can be answered by a collection of categories comprising all corresponding interviews. Steps 1 to 4 of the procedure were applied online with the software and the following steps (steps 5-7) were then conducted on paper. The procedure was first carried out for the pre-service teachers then for the in-service teachers.
6.4 Participants

In this study the participants are divided into two groups, namely pre- and in-service-teachers. This distinction was made for two reasons. On the one hand, Levin (2015: 57) observed that pre-service teacher beliefs are different from those of in-service teachers who have at least 5 years of experience. On the other hand, within the two groups, participants should be as homogeneous as possible because Buehl and Beck (2015: 67) criticize the simple categorization of pre-service and practicing teachers on the grounds that it obscures important nuances. For example, pre-service teachers were typically involved in student teaching or field placement and practicing teachers should be further
divided with regard to their points in their careers. Common criteria of all participants are that all teachers are female, their second subject is not English and they teach in a secondary school in Vienna.

The first group (PT1, PT2, PT3, PT4, PT5) contains the pre-service teachers that are at the end of their studies and have already some practice in teaching PE (up to 3 years). This practice of regular teaching during the end of the PE teacher education is fairly common in Vienna, though it is not part of the traditional understanding of the term ‘pre’-service teachers. Readers need therefore bear this particularity in mind when reading the empirical findings. Their second subjects and important information concerning their studies and teaching career are depicted in the following tables (7-11), as well as their reported language skills. Two teachers (PT1, PT4) report that their English language skills are approximately at the level of the Austrian Matura. In contrast, teachers PT2, PT3 and PT5 think that their English skills are better than the Austrian Matura level. Only one teacher (PT2) uses English on a regular basis as she shares her home with two refugees. In addition, this teacher and teacher 3 use their English reading skills regularly.

<table>
<thead>
<tr>
<th>Table 7: Teacher 1</th>
<th>Table 8: Teacher 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td><strong>Age</strong></td>
</tr>
<tr>
<td>29</td>
<td>33</td>
</tr>
<tr>
<td><strong>Second Subject</strong></td>
<td><strong>Second Subject:</strong></td>
</tr>
<tr>
<td>Physics</td>
<td>Informatics; Master in Sport Science</td>
</tr>
<tr>
<td><strong>Studies since</strong></td>
<td><strong>Studies since</strong></td>
</tr>
<tr>
<td>WS 2005/06</td>
<td>2012/13</td>
</tr>
<tr>
<td><strong>Teaches since</strong></td>
<td><strong>Still missing</strong></td>
</tr>
<tr>
<td>2013/14</td>
<td>1 Semester</td>
</tr>
<tr>
<td><strong>Languages</strong></td>
<td><strong>Still missing</strong></td>
</tr>
<tr>
<td>L1: German</td>
<td>3 Semester</td>
</tr>
<tr>
<td>English: Austrian Matura level</td>
<td></td>
</tr>
<tr>
<td><strong>Language Usage</strong></td>
<td><strong>Languages</strong></td>
</tr>
<tr>
<td>• When someone starts talking in English (e.g. asking for help)</td>
<td>L1: German, Slovakian</td>
</tr>
<tr>
<td>• With students who do not speak any German, but English</td>
<td>English: Better than Austrian Matura level</td>
</tr>
<tr>
<td>• Abroad</td>
<td>French: Austrian Matura level</td>
</tr>
<tr>
<td></td>
<td>Spanish: 3 years</td>
</tr>
<tr>
<td></td>
<td>Russian: 1 year; but good comprehension</td>
</tr>
<tr>
<td></td>
<td><strong>Language Usage</strong></td>
</tr>
<tr>
<td></td>
<td>• At home with two refugees</td>
</tr>
<tr>
<td></td>
<td>• Literature (Informatics)</td>
</tr>
</tbody>
</table>
The second group subsumes experienced in-service teachers (IT6, IT7, IT8, IT9; cf. Tables 12-15). In order to be able to participate in this study the teachers need to have at least 10 years of teaching experience. In regard to their estimated English level the in-service teachers are comparable to the pre-service teachers. In this group two teachers (IT7, IT8)
think that their English skills are better than the Austrian Matura level. These two teachers also speak English on a regular basis with acquaintances and friends. Additionally, teacher 8 habitually reads in English. The others (IT6, IT9) report an estimated English level equivalent to the Austrian Matura.

### Table 12: Teacher 6

<table>
<thead>
<tr>
<th>Age</th>
<th>55</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Subject</td>
<td>French</td>
</tr>
<tr>
<td>Studies completed in</td>
<td>1985</td>
</tr>
<tr>
<td>Teaches since</td>
<td>1985/86</td>
</tr>
<tr>
<td>Languages</td>
<td>English: Austrian Matura level</td>
</tr>
<tr>
<td></td>
<td>French: studies</td>
</tr>
<tr>
<td></td>
<td>Spanish: A2</td>
</tr>
<tr>
<td>Language Usage</td>
<td>• French: at school; with part of her family</td>
</tr>
<tr>
<td></td>
<td>• With students who do not speak any German, but English</td>
</tr>
</tbody>
</table>

### Table 13: Teacher 8

<table>
<thead>
<tr>
<th>Age</th>
<th>44</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Subject</td>
<td>Psychology &amp; Philosophy</td>
</tr>
<tr>
<td>Studies completed in</td>
<td>1997</td>
</tr>
<tr>
<td>Teaches since</td>
<td>1997/98</td>
</tr>
<tr>
<td>Languages</td>
<td>English: Better than Austrian Matura level</td>
</tr>
<tr>
<td></td>
<td>French: Better than Austrian Matura level</td>
</tr>
<tr>
<td>Language Usage</td>
<td>• French: with relatives</td>
</tr>
<tr>
<td></td>
<td>• English: Friends</td>
</tr>
<tr>
<td></td>
<td>• English: reading</td>
</tr>
</tbody>
</table>

### Table 14: Teacher 7

<table>
<thead>
<tr>
<th>Age</th>
<th>52</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Subject: Nutrition</td>
<td></td>
</tr>
<tr>
<td>Studies completed in</td>
<td>1991</td>
</tr>
<tr>
<td>Teaches since</td>
<td>2002/03</td>
</tr>
<tr>
<td>Languages</td>
<td>English: Better than Austrian Matura level</td>
</tr>
<tr>
<td></td>
<td>French: A2</td>
</tr>
<tr>
<td>Language Usage</td>
<td>• With students who do not speak any German, but English</td>
</tr>
<tr>
<td></td>
<td>• Acquaintances</td>
</tr>
</tbody>
</table>

### Table 15: Teacher 9

<table>
<thead>
<tr>
<th>Age</th>
<th>62</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Subject: History</td>
<td></td>
</tr>
<tr>
<td>Studies completed in</td>
<td>1978</td>
</tr>
<tr>
<td>Teaches since</td>
<td>1978/88</td>
</tr>
<tr>
<td>Languages</td>
<td>English: Austrian Matura level</td>
</tr>
<tr>
<td></td>
<td>Italian: Vacation</td>
</tr>
<tr>
<td></td>
<td>Modern Greek: Spoken everyday language</td>
</tr>
<tr>
<td>Language Usage</td>
<td>• Vacation</td>
</tr>
<tr>
<td></td>
<td>• Sometimes holds seminars in English</td>
</tr>
</tbody>
</table>
7 Results and Interpretation

The following chapters present and discuss the results of the interviews with the pre- and in-service teachers of PE. In doing so the following research questions are answered:

- What are pre- and in-service teachers’ beliefs about CLIL PE?
  - What does ‘CLIL’ mean to pre-service-PE-teachers and in-service-PE-teachers? (Chapter 7.1)
  - What role does language and communication play in general in teaching PE? (Chapter 7.2)
  - Why is PE suitable for CLIL provision? (Chapter 7.3)
  - To what extent can PE contribute to language learning? (Chapter 7.3)
  - How can CLIL PE foster cultural learning? (Chapter 7.3)
  - What challenges do teachers think they would need to face? (Chapter 7.4)
  - To what extent do teachers feel equipped to teach CLIL PE? (Chapter 7.5)
  - How desirable is it to teach CLIL PE? (Chapter 7.5)

The similarities and differences between the pre- and in-service teachers are immediately discussed in the chapters answering these questions as similarities and differences of the answers change with the questions.

It is important to note at this point that the conclusions that can be drawn from the study at hand are very tentative and are by no means necessarily applicable to other PE teachers due to the limited sample size (9). However, findings can be used as a starting point to critically discuss CLIL PE as well as to establish possible consequences for teacher education and further education in the Austrian context.
7.1 Meaning of ‘CLIL’

The first question seeks answers to what pre- and in-service teachers think when they hear CLIL or related terms (CLIL, EAA, bilingualer Unterricht). The answers represent whatever the teachers have already heard of and/or experienced or think about the terms. Experiences thereby are important building blocks of the beliefs a teacher expresses (cf. Chapter 5). One common answer is that neither the pre-service teachers nor the in-service teachers have gained experiences with CLIL during their teacher education or further education, which reflects the limited possibilities of CLIL (PE) teacher education in Vienna (cf. Chapter 2.4.2).

Pre-service teacher 1 knows CLIL because she went to a school with a bilingual branch and therefore experienced CLIL indirectly. She summarizes that students from her school within a CLIL class were very content with their education because they learnt much. This pre-service teacher also has limited experience in using English as the language of instruction (skiing lessons for an international school). Nonetheless, she has a negative attitude towards this concept because she feels that her language competence is too low and an experience made during her work as a teacher:

Für mich ist es zweitrangig, ob Kinder Englisch sprechen oder nicht, weil wir in der Schule sehr viele Kinder mit Migrationshintergrund haben, die kein Deutsch können. Für mich ist in erster Linie Deutsch als Fremdsprache interessant [...]. [It is secondary for me whether or not the children speak English because in my school there are many children who cannot speak German. For me German as a foreign language is more important.]

Pre-service teacher 2’s understanding is based on the CLIL and VBS branches in the school she teaches. However, she has never tried to get to know this concept better as it does not concern her subjects. Her basic understanding is that English is spoken in some subjects instead of German, with a native speaker being the one who teaches in English. Pre-service teacher 5 first says that she does not know what CLIL is, but then remembers that she has been to a class with CLIL provision (subjects of natural sciences). She also teaches at the same school as teacher 2, but does not mention the CLIL and VBS branches of the school during the interview. Generally, attending CLIL classes has been positive for teacher 5 because she has learnt much. However, she stresses negative effects three times - the
danger of mixing languages, the feeling of not becoming competent in both languages and the perceived decrease of the level of German:

An und für sich finde ich es wirklich gut, man lernt viel dazu, man verknüpft viel miteinander. Was nicht so toll ist, ist, dass man eben in einer Sprache ein bisschen nachlässt, finde ich. Also man kann keine Sprache so perfekt sprechen, wie jemand der nur Deutsch spricht.

[In principle it is very good because you can learn much and learn to relate much. I think that it is not good that one language deteriorates a little. One cannot speak a language as perfect as someone who can only speak German.]

Interestingly, this view correlates with a common misconception of CLIL that needs to be overcome, namely that students’ native-skills decrease (Mehisto et al. 2008: 20; cf. Chapter 2.3).

Pre-service teacher 3 has not heard any of the terms before. She thinks about CLIL as an interdisciplinary approach of combining PE with English with the help of a native speaker and that the aim of such an education is:

\[
\text{dass man vielleicht die Fachsprache [von Sport] eben auf Englisch oder auf einer anderen Sprache fördert und dass man quasi von dem Einen in das Andere greifen kann und umgekehrt. [to maybe promote the technical language [of sports] in English or another foreign language and that one can use the languages interchangeably.]
\]

Pre-service teacher 4 also has never heard of the concept and did not elaborate what she felt it might be. In order to integrate a student without German knowledge she has tried to instruct in English, so that this new student can follow as well. Generally, teacher 4 thinks that it has been an exciting experience because speaking English to children puts less pressure on her than speaking to adults, but CLIL teaching is not attractive for her.

In-service teacher 6 understands CLIL as teaching other subjects in English, but says that “eine Zielsetzung von einem CLIL Unterricht ist mir nicht bekannt [I do not know about the aims of CLIL]”. Interestingly, she too teaches in the same school with the VBS and the CLIL branch as pre-service teachers 2 and 5. Furthermore, at the beginning of establishing the CLIL branch in this school all teachers were told to hold CLIL lessons. Thereupon, this teacher then simply conducted her PE lessons in English without further modifying the lessons or integrating language goals. Generally, she experienced CLIL as something positive because the school’s popularity has increased since the introduction of the CLIL branch.
In-service teachers 7, 8 and 9 think that CLIL is about teaching content in another language with the aim of acquiring the foreign language alongside similar to the first language (cf. Krashen 1981). Teacher 7 has taught after-school activities in an American school in English, but without a language focus. However, she liked teaching in English. Teacher 8 tried to hold some lessons in English in order to integrate a student without knowledge of German, an undertaking which did not work out, except that the teacher reports that she liked speaking English. In general, teacher 8 shows interest in this concept and asks herself questions how CLIL might work, e.g. who teaches CLIL or how grades are given. Teacher 9 has no experiences with CLIL at all, however she shows a very positive attitude towards teaching CLIL (PE): “[CLIL ist] ein gutes Werkzeug um Schülerinnen und Schülern den selbstverständlichen Gebrauch einer zweiten Sprache mitzugeben [[CLIL is] a good tool to promote the natural usage of a second language]” or “[F]ür mich wäre das ein super Konzept […] [for me personally, it would be a great concept […]].”

In summary, all teachers show a shortened understanding of CLIL, namely that content is simply taught via another language, as Vollmer (2008: 51-57) had mentioned. This is interesting as some of the teachers have experienced CLIL personally or through their school. In relation to differences and similarities of pre-and in-service teachers a generalization cannot safely be made because there are not identifiable reasons that relate to the amount of teaching experience. There are teachers from both groups that show a positive general attitude towards CLIL (PT5, IT6, IT9).

7.2 The Role of Language and Communication in PE

Balz & Frohn (2006: 56) observed communication in PE lessons of in-service teachers. They discovered that teachers speak a lot, but only some situations are about mutual understanding. Explanations, corrections and feedback are domineering. Sometimes casual conversations occur and problems are faced regularly. The authors argue that to improve communication, teaching and language use has to be more student-oriented. Pre-service teachers try to engage students in deeper communication in the authors’ (ibid.) study. Balz and Frohn’s observation is not reflected in this study, as the answers of the teachers will show in the following paragraphs. First an overview of the teachers’ reported language use is provided. Then student-orientation in communication is discussed. To sum up, each teachers’ individual approach to language use and communication is depicted.
7.2.1 Teacher-oriented Communication

Teachers 1, 2, 3, 5 and 9 report that language and communication plays an essential role in their PE lessons, however only one pre-service teacher (PT5) can remember a specific lecture in her studies that addressed language and communication explicitly. Pre-service teacher 4 says that this area was not part of her studies. The other pre-service teachers (PT1, PT2, PT3) agree that there was not one explicit course, but language was touched on periods of observation and teaching units. In this respect, all in-service teachers state that language and communication were not explicitly addressed during their studies. The only time it was mentioned was when they were told not to use dialect or to speak louder (teachers 6, 7 and 9). The teachers’ answers allow a tentative conclusion that language and communication is slightly more included in the current PE teacher education, however, it could or should be addressed more (cf. Chapter 3.2).

Overall, language and communication is most often used in a teacher-oriented way. All teachers utilize language for explanations as well as corrections and feedback (Figure 8). Correcting students is seen by most of the teachers as a domain of oneself. Only two pre-service teachers (PT3, PT5) report that they have at least tried to engage students actively in providing feedback, but it did not work as planned. In contrast three of the in-service teachers (IT6, IT8, IT9) regularly demand peer-feedback. Teacher 6 even states that “das gehört für mich zur Sozialkompetenz dazu [for me it is part of the social skills]”. In the light of theoretical findings this hesitant use of peer feedback and correction is understandable (cf. Chapter 3.2). Nietsch & Vollrath (2003: 15) argue that young learners can often only discover severe mistakes and cannot find the cause of the problem or provide strategies for improvement. As pointed out elsewhere, this view is contested and it should become self-evident to enable students to correct their own performances and their peers (Achtergarde 2007: 214-215), which the majority of teachers (PT3, PT5, IT6, IT8, IT9) use or at least try. The belief of teacher 7 concerning feedback has to be seen critically, because it relates to a fact that Thiel (2002: 51-52) criticizes, namely that feedback should be transparent and it needs to match the actual achievement:

Wobei man immer ein bisschen vorsichtig sein muss mit diesen Korrekturen weil sie sind immer gleich angerührt die Damen. [...] Das wird ganz genau abgewogen, was man sagt, zu wem und deswegen, ich halte mich da immer sehr im positiven Bereich eigentlich. Also Korrektur, wie ‘Das hast du jetzt
wirklich nicht gut gemacht’ das gibt es bei mir eigentlich fast nie. Aber sie können das, wenn sie schlau sind eh heraushören, anhand des Lobes. (IT7) [One has to be a bit cautious with corrections because the ladies are immediately huffy. [...] They weigh up precisely what the teacher said to whom. That is why I try to stick to positive feedback. I hardly ever use corrections like ‘You did not do well’, but smart students can hear critique on the basis of my praise.]

Apart from oral explanations that all teachers report using, pre-service teacher 3 indicates that she sometimes uses written instructions too. Additionally, she includes the explicit teaching of technical terms in the category of explanation: “[W]enn ich einmal eine Matte zum Beispiel in der Hand gehabt habe muss ich schon wissen, dass das Matte heißt und nicht Matratze oder Teppich [When I have a mat in my hands I need to know that it is called a mat and not mattress or carpet]” (PT3). The only area where answers from pre- and in-service teachers differs is in the category of problem-solving. Altogether three pre-service teachers (PT1, PT3, PT4) claims to apply language in this category as well as in-service teacher 9: “[I]m Ernstfall wenn Konfliktinstitutionen da sind, aber eigentlich zur Vermeidung von Konfliktinstitutionen [In the case when conflicts occur, but rather to avoid conflicts]”. In this context Klingen (2013: 176) recommends increasing meaningful (student) communication, to achieve positive effects on classroom disturbances, motivational or disciplinary problems.

The amount and the quality of teacher-oriented language use discussed in the previous sections of this chapter seems not to be equally used for all students, but to differ among age groups. Generally, the teachers agree that there is a difference in communication between lower and upper secondary classes (Table 16). Only teacher 6 does not see a difference in her communicative patterns. A tendency towards the use of an easier language for younger students can be observed.
Table 16: Differences in language use of lower and upper secondary classes

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Lower secondary</th>
<th>Upper secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>2&lt;sup&gt;6&lt;/sup&gt;</td>
<td>“Die jüngeren Schülerinnen verstehen manches noch nicht. [Younger students do not yet understand some things.]”</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>“Ich spreche in der Unterstufe korrekter, weil Erklärungen öfter nicht verstanden werden. [I speak more correct with lower secondary forms because they often do not understand explanations].”</td>
<td>“In der Oberstufe ist mein Sprachgebrauch lockerer, weil ich mit den Schülerinnen eine andere Kommunikationsbasis habe und auch andere Themen besprechen kann. Meine Erklärungen sind auch legerer. [With upper secondary forms my language use is more casual because I have another basis on which to communicate and I can also discuss different topics. My explanations are also less formal].”</td>
</tr>
<tr>
<td>4</td>
<td>“In der Unterstufe muss ich zur Organisation und für disziplinäre Inhalte mehr sprechen. [With lower secondary forms I have to talk more to organize or discipline.]”</td>
<td>“Die Oberstufen sind ruhiger [Upper secondary forms are calmer].”</td>
</tr>
<tr>
<td>5</td>
<td>“In der Unterstufe glaube ich reden sie [die Schülerinnen] oft ohne nachzudenken. [I think that students from lower secondary forms often speak without thinking.]” “Ich formuliere einfacher. [I express myself in an easier way.]”</td>
<td>“Die Schülerinnen sind genauer und sprechen bewusster [Students are more precise and speak more deliberately].” “In der Oberstufe erwarte ich mehr Selbstständigkeit [in the upper secondary form I expect more independence].”</td>
</tr>
<tr>
<td>6</td>
<td>“Viele Schüler haben nicht muttersprachlich Deutsch und da entwickelt sich interessanterweise genau in diesen bilingual- und CLIL-Klassen so, dass sie oft in Englisch viel taffer sind als in Deutsch. Und wenn in Deutsch Inputs kommen, dann stehe ich oft wirklich auch in der Oberstufe davor, ja was ist das denn eigentlich. Und dann muss man es halt erklären. Und da ist kein Unterschied zwischen den Kleinen und den Großen [Many students do not have German as their L1 and interestingly the development of these bilingual and CLIL classes lead to the result that they are much better in English than in German. When I give input in German, then I often experience misunderstanding also in higher secondary forms. Then you have to explain it. There is no difference between the younger and older ones].” “Je komplexer man versucht das zu erklären, desto weniger Erfolg hat man. Je einfacher es geht und je kürzer sozusagen die Anweisungen sind, desto leichter setzte ich die Dinge auch um [The more complex the explanations are, the less successful it is. The easier and shorter instructions are the easier they are to follow].”</td>
<td></td>
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</table>

<sup>6</sup> Teacher 1 did not answer this question.
7.2.2 Student-oriented Communication

The importance of student-oriented communication has already been discussed in the theoretical part of the paper (Chapter 3.2). Devos (2012: 360) specifies that if CLIL PE should offer successful learning opportunities student-led learning needs to be fostered. This chapter describes what the interviewees say about this issue.

Altogether four of the pre-service teachers (PT2, PT3, PT4, PT5) talk about student-oriented communication. Teacher 2 specifies that it plays a role in her teaching and exemplifies that in her lessons students need to collaborate when they do group work and also to negotiate tactics during games. Teacher 3 reports that she explicitly aims at improving her students’ German and therefore asks for correct language use. In addition, her students need to prepare short presentations. When problems occur she helps the students to discuss them. Teacher 4 states that her students talk when they have questions and articulate their needs. She also mentions communication during games. This teacher specifies that she assigns two short periods (5-7min) to student talk at the beginning and end, which is criticized in the literature (cf. Chapter 3.2). Teacher 5 sees student communication as a connective element used during games, to ask questions and for group work.
In comparison, all in-service teachers comment on student-oriented communication. Their reported approaches to it vary enormously. Teacher 7 says that she rarely uses content with student-oriented communication. In contrast, teacher 6 reported paying special attention to fair play as well as social competence and therefore uses student talk to that effect. In teacher 8’s PE lessons student-oriented language and communication is claimed to be established in many instances (e.g. general language, social interaction, peer feedback). Teacher 9 seems to lay a good communicative basis in her PE lessons because she reports using peer-feedback and group-work regularly.

7.2.3 Individual Teachers’ Approaches to Communication

In this chapter general tendencies of all teachers concerning their beliefs about language and communication are presented. For teacher 1 the most pressing usage of language and communication is for problem-solving. In this regard, the participant states that: “Ich versuche den Schülerinnen beizubringen, dass Kommunikation sehr wichtig ist [I try to teach students that communication is very important]”. Teacher 2 says that she pays special attention to the comprehensibility of her language for explanations, which is her main language use, and says that “es ist wichtig, wenn man sich vorher überlegt wie man erklärt [it is important to consider beforehand how to explain content]”. This belief correlates with Klingens’s opinion (2013: 20) about the necessity of language planning in PE. The language of the students also plays a role in her teaching when they need to negotiate strategies of games and sports or other group work (e.g. planning a choreography). Teacher 3 suggests the most specific use regarding language teaching in PE of all teachers. This becomes clear in her objective that students should improve their German also in PE because approximately 95% of the children she teaches have a first language other than German. This teacher also presents ideas how to use language learning in PE. Furthermore, she says that she pays attention to correctness when students ask questions, do presentations or teach short sequences. In conclusion, she seems to develop a kind of a language learning environment which is student-centered and would be vital for a CLIL classroom. Teacher 4’s reported usage of language and communication includes explanations, problem-solving and feedback. She states that student communication is mainly used at the beginning and at the end of the lessons and is limited to a minimum during the lessons. Teacher 5 also reports using language to explain, give feedback and
especially for praising. She thinks that language and communication are vital, however she
does not qualify language use: “Ich organisiere Gruppen, aber spreche nicht über Sprache
und Kommunikation. Ich schaue, dass es von alleine passiert. [I organize groups, but I do
not talk about language and communication. I try to let it happen alone.]” This view needs
to be changed in order to successfully teach CLIL PE. Klinge (2013: 176) for example
reasons for including communication as content of physical education (cf. Chapter 3.2).
Teacher 6 views language and communication as follows: “Hauptunterschied im
Sprachgebrauch ist, dass die Kinder Sport als Spaß betrachten. Dann ist es leichter Dinge zu
kommunizieren [The main difference concerning language use is that for children sports
signifies fun. This makes it easier to communicate].” She describes her special focus as
being on developing social competence and fair play with the use of language. Teacher 7’s
view on the subject is different to that of all other teachers. One of her statements
concerning language and communication summarizes her stance well: “Wenn, dann spricht
der Lehrer weil er etwas erklärt oder Anweisungen gibt. Die Kinder selber sprechen nicht
in ordentlichen Sätzen [If somebody speaks, it is the teacher because they have to explain
or instruct. The children do not speak in proper sentences.]” Teacher 8 reports that she
uses many small instances of language and communication throughout her lessons and
tries to meet her students’ communicative needs. Teacher- and student oriented use of
communication play a vital role for teacher 9. She reports that she takes special care to find
the most suitable words:

Also wenn ich es jetzt aufsplitte sozusagen, wie Kommunikation stattfindet, dann ist im Sport sehr oft die nonverbalen einmal geschwind bei der Hand. Und es bedarf aber sehr rasch des Nachbessern mit der Sprache. Und da glaube ich ist es ganz wichtig die richtigen Worte zu finden, weil sehr oft Emotionales mittransportiert wird damit. Und wenn man da nicht fit ist mit der Sprache, oder wenn man da nicht die richtigen Begriffe hat, dann gleitet das oft in eine Richtung, die man nicht mag. [When I consider how communication takes place, then non-verbal communication is quickly at hand. But it needs to be concretized quickly with spoken words. I think that it is very important to find suitable words because very often affective content is expressed. If you do not know a language well or do not know suitable vocabulary, it happens easily that it leads into a direction that is not wanted.]

Nachdem Sport für mich sehr viel mit dem eigenen Körper zu tun hat im Sinne von Körpererfahrung, Wahrnehmung, diese Dinge ist die Auswahl der Worte etwas ganz Sensibles und Wichtiges. [For me sport has a lot to do with knowing one’s own body, body awareness etc. and words need to be chosen with care.]
To conclude this chapter, it can be said that differences in pre-and in-service teacher beliefs cannot be reported. For example, the lessons with most reported opportunities for students to communicate as well as the ones with least reported student orientation both come from in-service teachers, IT9 and IT7 respectively.

7.3 The Suitability of PE for CLIL provision

Altogether, the participants of the interviews find six reasons why PE is a suitable subject for CLIL provision (cf. Figure 9). These reasons can also be found in the literature (cf. Chapters 3, 4), but differences between pre- and in-service teachers cannot be found. Only one in-service teacher (IT7) does not find instances why PE may be suitable for CLIL provision: “Deswegen wirklich zum Sprache lernen ist er [der Sportunterricht] jetzt nicht wirklich primär geeignet. [Therefore, really for learning languages, [physical education] is not really especially suitable]”

![Figure 9: Reasons for suitability of PE for CLIL (n=9)]

The majority of teachers (PT2, PT3, PT4, PT5, IT9) see an advantage in using movement for learning a language. The teachers have different explanations for this. On the one hand, an additional mode of perception, namely kinesthetic perception, can be used for learning (PT2). On the other hand, the teachers reason “weil beide Gehirnhälften miteinander verknüpft werden [because both sides of the brain are linked]” (PT5) or “weil durch die Bewegung auch das Hirn mehr durchblutet wird [because due to movement the brain can be better supplied with blood]” (IT9). Some teachers also report that movement und PE
offer opportunities that engage children affectively. Therefore, teachers 2, 4 and 9 think that the fun students have in PE is another argument for CLIL PE provision. “Beim Sportunterricht, wenn die Kinder gut drinnen sind oder die Jugendlichen, glaube ich fällt es ihnen viel weniger auf wenn da jetzt eine andere Sprache verwendet wird, als wenn sie im Klassenverband in der Klasse sitzen [In PE, when children or youths are engaged, I think that they notice less that a different language is used, in comparison to sitting in a class together]” (IT9).

Four teachers (PT3, IT6, IT8, IT9) see culture as a possible connecting factor to establish CLIL PE lessons. What culture and cultural learning entails is described in Chapter 7.4. For four teachers establishing English language teaching in PE is fairly easy because many English words already exist in the technical language of sports (PT3, IT6, IT8, IT9). Similarly, four teachers (PT2, PT3, PT5, IT8) also mention the opportunity of authentic language use in CLIL PE. Teacher 2 highlights that it is not about teaching knowledge, but applying this knowledge (e.g. in a game) and teacher 8 talks about various opportunities to use the language on different levels (content level, personal level).

Finally, teachers 1, 3 and 9 think that PE is a good subject for CLIL because the subjects’ conditions differ in comparison to most other subjects in school (cf. Chapter 3). Pre-service teacher 1 mentions that the pressure of grading is lower:

[I]ch glaube sehr wohl, dass es zutrifft, weil sie trauen sich im Sport einfach viel mehr, weil sie dort diesen Noten- und Leistungsdruck nicht so stark spüren und haben wie in jedem anderen Fach. [I think that this is true because they dare to do more in sports because they do not feel the pressure concerning grades and to perform lesser than in all the other subjects.]

In-service teacher 9 argues:

[...] dass es nicht so Klassenraumgebunden ist, was für mich immer beschränkend ist. Also in einem Turnsaal oder Freibereich, das ist für mich ein offeneres Arbeiten. Oder überhaupt eine offene Erfahrung. Im Gegensatz zu diesem eher geregelter Klassenstrukturleben. [...] it is not bound to classrooms which I always feel as limiting. For me working in the gym or outside is more open. An open experience.]
7.3.1 Language learning in CLIL PE

As pointed out elsewhere (cf. Chapter 2) nowadays, most researchers view CLIL as an integrated learning of content and language. However, according to Vollmer (2008: 54), a number of teachers still understand CLIL as content teaching simply via another language where the language is also improved. This seems to be the case albeit unsystematically and random. Most answers of the interviewees express a view that correlates with theis statement. The teachers’ ideas about language teaching are likely to stem from their experiences as students, as Basturkmen (2012: 283) postulates. In this context it seems useful to once again refer to Rottmann (2006: 238) who highlights the importance of planning well in CLIL PE in order to foster language learning, an understanding that future CLIL teachers need to acquire (cf. Chapter 4.2).

Generally, listening skills, speaking and work on lexis are the three areas that are reported to be mainly developed in CLIL PE. All teachers agree that listening is the skill which can be best fostered in CLIL PE. “[D]as Hören eigentlich. Das Verständnis. Das rasche Verstehen [In fact, listening. Comprehension. Comprehending fast]” (IT7), “[H]ören, wenn die Anleitungen auf Englisch kommen [Listening, if the instructions are in English]” (PT4). The teachers’ understanding seems to follow the idea of language acquisition as these quotes show the belief that listening can be fostered by simply being exposed to the English language without further exercises. In relation to spoken language production the teachers’ opinions differ. Pre-service teacher 1 believes that speaking can be fostered, though she cannot ‘focus on form’ because of missing language competencies. In contrast, pre-service teacher 2 is unsure and states that this language area could be fostered. Pre-service teacher 4 agrees, and sees some possibilities to foster speaking through student interaction during games whereas pre-service teacher 3 sees potential to develop speaking skills through presentations or holding parts of lessons. Additionally, she argues that students have to talk in English instead of German and therefore have extra language practice. In the group of the in-service teachers, only teachers 6 mentions that speaking may be fostered and teacher 9 suggests that it can be used very well. Another language area that all teachers agree can be taught well or rather can be picked up well is (technical) vocabulary. For in-service teacher 9 the learning of vocabulary occurs in parallel: “Wenn, wenn ja wenn es zum Vokabellernen beispielsweise geht, wenn du das fünfte Mal hörst, was ein Begriff ist,
dann brauchst du das Vokabel nicht mehr zu lernen, sondern dann ist es, dann ist es drinnen [When vocabulary learning is concerned for example. If you hear a certain term for the fifth time, you do not need to learn it, you just know it].”

The beliefs about the possibility to teach reading differ greatly among the pre-service teachers. Teacher 1 sees a good opportunity in developing reading skills through written instructions, as she has experienced in a (German) reading project in her school that affected all subjects. On the contrary, pre-service teacher 3 states that reading is the skill that can be developed with the most difficulties. Pre-service teacher 5 neither agrees or disagrees with either of these statements. In contrast, the in-service teachers (IT6, IT8, IT9) agree that reading is not suitable for fostering language learning in CLIL PE. In teacher 8’s school the reading project has also been established and she reports:

[Wir haben ein Leseprojekt, also das ist schon ein bisschen zäh finde ich. Relativ zäh. Im Sportunterricht also das ist ein bisschen konstruiert. [...] Das [Verwenden von schriftlichen Anleitungen] ist sehr wohl eine Möglichkeit. Das könnte man auf Englisch genauso machen natürlich. Aber erfahrungsgemäß ist es nicht das was sie wollen im Sport. Da wollen sie sich bewegen und nicht sitzen und lesen. Das ist auch mein Zugang [...], dass sie sich bewegen [sollen]. [We have a reading project which I find already a bit annoying. Relatively annoying. In PE it is artificial [...] It [the usage of written instructions] is a possibility. You could do that in English as well. But experience has shown that it is not what they want in PE. They want to be active and not to sit and read. It is also my stance that they [should] be active.]

Fostering written production is not possible in PE according to teachers 1, 2 and 9. Pre-service teacher 3 has the idea of using presentations and producing lesson plans for written assignments and pre-service teacher 5 could think of a game using writing. Generally, written language is often neglected in PE, however flashcards or written instructions can be valuable for the development of the students’ reading skills (Strangwick & Zwozdiak-Myers 2004: 70). Lutz (2015) goes further and states that effective motor learning can be supported by writing processes. The possibilities of teaching grammar are like-wise judged critically. Pre-service teacher 5 and in-service teacher 9 for example see chances to develop grammar as non-existent. Only pre-service teacher 4 can think of creative opportunities to incorporate grammar teaching, for example, for her the comparative is well presentable or tenses can be embodied in a room. The answers are based on a traditional understanding
of language and grammar learning, not on the understanding that grammar teaching should be part of the lessons as content demands it.

### 7.3.2 Especially Suitable Content for CLIL provision

The national curricula determine the content of PE lessons (cf. Chapter 4). However, there might be content that lends itself more easily for CLIL PE provision. The question of what content is especially suitable for CLIL PE challenges the teachers for ideas in order to better understand their thoughts of CLIL PE. Three pre-service teachers (PT1, PT3, PT4) report that content related to the Anglo-American language area (e.g. specific sports like rowing, new trends) is a good starting point for language learning (cf. Chapter 7.4). In contrast, in-service teacher 6 would choose content that students need to explain to the others:

> Wenn sie selbst zum Beispiel kleine Inputs geben um anderen etwas zu erklären. Das ist finde ich ein recht brauchbares Instrument um mit der Sprache zu arbeiten. Weil egal sage ich jetzt einmal ob das auf Deutsch oder Englisch kommt, sie müssen lernen konkrete Anweisungen zu geben und nicht mach das so. [If they need for example to explain to the other students little parts. This is a rather suitable instrument to work with languages. It does not matter whether this is German or English, they need to learn to give precise instructions and not: do it like this.]

Using games was also suggested three times (PT2, PT4, PT5). Pre-service teacher 4 explains her considerations: “[… Inhaltsweise] ist glaube ich etwas, was lustvoll ist, was ihnen Spaß macht [gut]. Das ist wichtig. Also zum Beispiel ein Spiel […] Content-wise] something that students enjoy should be taken]”.

Pre-service teacher 1 suggested using cooperation and interdisciplinary projects or providing theoretical input (e.g. nutrition, health…). This goes in a similar direction to in-service teachers’ 7 and 8 opinion who would rather use modular CLIL than regular CLIL provision in PE. They believe that extra-curricular activities are more suitable. In-service teacher 7, who also thinks that PE is not suitable for language learning, sees the opportunity in using events “wo man wirklich auch mehr reden sollte. […] Sportfeste oder solche Dinge. Oder die Sportwochen, Schikurse [where one has to communicate more. […] Sports festivals or such events. Or sports weeks, skiing weeks.]” In-service teacher 8 has already experienced sports weeks with CLIL PE provision by native speakers. She regularly choses a provider of such sports weeks in Wagrain and has had positive experiences with it.
throughout. During regular CLIL provision this teacher would first explain content in German and in the next lesson use the already presented content in English.

Pre-service teacher 4’s approach views CLIL PE from a different angle. She believes that the content that students like is always a good idea to use. As well as games the interviewee would use choreography to a song in English or group work, something that Devos et al. (2013: 13; 2012: 359) also recommend because research in CLIL PE has shown that phases that were highly rewarding language wise occurred in self-organized pair work or group work.

To summarize, the answers about the suitability of PE for CLIL provision are heterogeneous. The topmost answers were that the teachers see a chance of learning through movement, a connection with already existing technical terms of sports in English, culture as the connecting factor and opportunities for authentic language use. When the teachers were asked to think about language learning that can take place in CLIL PE all of them suggested the development of oral receptive skills and vocabulary. In this chapter no main differences between pre- and in-service teacher can be observed.

7.4 Cultural Learning in CLIL PE

Apart from content and language learning CLIL also aims to foster cultural learning (cf. Chapter 4.1). Therefore, the teachers were asked how PE can contribute to this field. However, ideas from pre-service teachers to meet this goal were scarce. One pre-service teacher did not even not know what cultural learning is (PT4). These findings are surprising because cultural learning is anchored in the Austrian curriculum (cf. Chapter 4.1.1). Pre-service teachers 2 and 3 think that sport itself is intercultural and therefore, students should be shown the whole range of possibilities and spectrum of sports. In relation to CLIL PE four pre-service teachers (PT2, PT3, PT4, PT5) suggest to use movement and sports that originate in an English speaking country, like Flag Football. Pre-service teacher 5 specifies that in order to foster cultural learning she would need to talk about the country first, then maybe watch a short sequence before playing the game. This view is also represented in the literature (cf. Chapter 4.1.1). Many authors (Schmidt-Millard 2004: 320; Rottmann 2006: 244; Menze-Sonneck & Devos 2013: 81) argue that culture, in a narrow sense, can be addressed very well in CLIL PE because typical sports from English speaking countries
lend themselves as material through which different practices and traditions in the field of sports can be discussed.

In relation to this question the answers of the in-service teachers differ. Culture in a closed sense is raised only twice (IT8, IT9) and teacher 9 sees addressing typical sports from English speaking countries rather critically: “Naja, da sind wir irgendwie so im Klischeebereich mit Kultur. [Well, here we are somehow in a rather stereotypical understanding of culture].”

For in-service teachers 6, 7 and 9 a point of reference is the reality of sports. In-service teacher 6 sees the aim of intercultural communication as to be able to understand sportspeople from all over the world. This corresponds with the view of language as the connecting factor. In contrast, in-service teachers 7 and 9 view sports as the connecting factor:

“Ich habe das Gefühl, dass Sport eine internationale Sprache ist [...]. Und dass über Bewegung, [...] jede Form von kulturellen Unterschieden sehr geschwind nivelliert wird. Beziehungsweise auch sehr, wann es schlecht läuft, sehr schnell kulminiert. Und damit ist für mich die Chance über den Sport etwas zu vermitteln risikolos. [...] Also da ist der Sport die gemeinsame Sprache oder das gemeinsame Erleben. (IT9)

[I have the impression that sport is an international language. [...] And that in joint activity every form of cultural difference can be leveled out quickly. Or culminate quickly, if something goes wrong. For this reason, the chance to convey something with sports is without risks. [...] In that case sport is the common language or the joint experience.]

“Ich meine Sport ist etwas sehr Verbindendes. Es geht halt auch über Länder über Grenzen, über Sprachbarrieren hinaus. (IT7)

[I think that sport is something that connects [people]. It transcends countries, borders, language barriers.]

In-service teacher 7 adds that different practices can be compared and a common language can serve to impart practices to others. In-service teacher 9 specifies that culture is always learnt during language teaching because it is immanent to languages. Both teachers also focus on the importance of fair play which can serve as grounds for cultural learning in a broad sense (cf. Chapter 4.1.1).

In-service teacher 8 emphasizes here too (cf. Chapter 7.3.2) that a modular approach to CLIL would be suitable. Projects, sports weeks with native speakers or partner schools and exchange (either physical or via email) can foster cultural competence. Other than that she does not see fostering cultural understanding in CLIL PE because she does not teach
children with an English/American background, which correlates with a narrow understanding of culture. Additionally, she states: “Es gibt oft so höhere Ziele was man nicht alles tun könne ((lacht)) und in der Realität ist es dann irgendwie immer [anders]. [There are often higher goals about what else one could do ((laughs)) and in reality it is always [different]]”.

To sum up, concerning the category discussed in this chapter, the opinions of pre- and in-service teachers differ. The pre-service teachers can understand the term cultural learning less than their more experienced colleagues. Furthermore, their focus is more on a narrow understanding of culture that is using traditional English or American sports to teach culture.

7.5 Challenges That Need to be Faced

When it comes to challenges teachers expect to face when teaching CLIL PE the interviewees were especially creative, yet teacher 9 believes that there are no difficulties in teaching CLIL PE. “Ich glaube, die [Schwierigkeiten] müssten nur überwunden werden bei Leuten die sagen das passt nicht zusammen. Aber wenn man sagt man will das machen, dann glaube ich ist das ganz leicht machbar [I think that they [difficulties] only need to be overcome by people who say that it does not go together. But if one really wants it, I think that it is easy to achieve]”. Generally, the answers can be divided into three categories: challenges concerning the teachers (Figure 10) challenges concerning the students (Figure 11) and the rest (Figure 12). Some categories are suggested by pre- as well as in-service teachers, others in turn are only mentioned by a teacher from one group. These differences among the two groups neither follow a comprehensible pattern nor can they be explained.

First of all, many of the expected problems relate to the teachers (Figure 11). The most pressing issue for nearly all interviewees (PT1, PT2, PT4, PT5, IT6, IT7, IT8) is the CLIL PE teacher’s language competence. The following quotations should illustrate their concerns and beliefs:

Mein Englisch ist nicht gut genug, dass ich es jemandem beibringen kann. (PT1)  
[My English is not good enough to teach it to someone.]

Wenn das [die englische Sprache] die Lehrerin wirklich gut kann, dann ist das für sie [die Schülerinnen] sicher eine Möglichkeit die englische Sprache lustvoll zu lernen. (PT4)
[If the teacher knows it [the English language] really well, it might be a possibility for them [the students] to learn English in a pleasure oriented way.]

[... Die Lehrkraft muss [...] sich auf jeden Fall ausdrücken können auf Englisch, sowie auf Deutsch. Also das muss schon sitzen, weil wenn ich dann ein falsches Englischrede, dann hat das glaube ich nicht so viel Sinn für die Kinder. (PT5)

[The teacher needs to be definitely as well versed in English as in German. The language skills need to be deeply anchored, because when I speak ‘incorrect’ English it does not make sense for the children.]

Da bin ich zu sehr Sprachlehrer. Ich weiß was ich auf Französisch kann und was ich dort verbessern kann und ich würde mir das nie im Englischen anmaßen. (IT6)

[I am too much language teacher. I know what I can do in French and what I can improve there I would never arrogate for English.]


[I would have reservations that my English is not good enough. Grammar-wise and I do not know what else. Only to imagine the tenses that I would definitely use wrong tenses. This is totally irrelevant in normal chit-chat. Yes, this is something I could do well, but when I say that they [students] should profit. I would teach the [students] something wrong.]

[.. Der Lehrer müsste so kompetent sein in der englischen Sprache und das ist glaube ich ganz ganz häufig nicht gegeben. Ja, weil dass man dann irgendeinen Kauderwelsch daher spricht finde ich als wenig sinnvoll. (IT8)

[The teacher would need to be a competent user of English and that is very often not the case. Well, for one to speak nonsense is not sensible.]

Like the interviewees Vollmer (2008: 58) also considers the question of a CLIL teachers’ foreign language competence. He argues that

[...] der Erfolg [beruht] ebenso sehr auf der Qualität des Inputs und vor allem seiner mentalen Verarbeitung sowie auf der Qualität der Interaktion im bilingualen Klassenzimmer [...] [success [rests] equally on the quality of the input and especially on its mental preparation as well as on the quality of the interaction in a bilingual classroom [...]].

Further evidence of the importance of a certain language level is given in the fact that teachers in Germany are required to have at least a C1 language level according to the common framework of reference for languages (cf. Chapter 2.4.2).
The aforementioned factor ‘language competence’ goes hand in hand with another expected challenge, namely the question of who should teach CLIL PE. Altogether four of the teachers (PT2, IT6, IT7, IT8) address this issue. Suggestions are that it has to be a teacher with the combination of PE and English who can teach CLIL PE successfully (IT7) or a native speaker who comes along for team teaching (PT2, IT6, IT8). However, the use of a native speaker is also seen critically (IT6, PT2): “[…] wir machen jetzt im Sportunterricht das und das und der Mensch hat aber vom Sport selbst null Ahnung und soll jetzt hier sich irgendwie einbringen […] we do this and that in PE and someone who does not know anything about PE has to play a part in that” (IT6).

Interestingly, only two teachers (PT3, IT6) anticipate difficulties in teaching a foreign language without knowledge of language didactics. At the same time these two teachers are language teachers themselves with Latin and French, respectively. Furthermore, the negative factor ‘time for preparation’ plays only a minor role for the interviewees (PT2). This stands in contrast to what the literature claims. Rottmann (2003: 14; 2007: 205), for example, reports that even teachers with English as a second subject often hesitate to teach CLIL PE because a clear model is missing and much time needs to be allotted for preparation.

![Figure 10: Challenges of CLIL PE concerning teachers (n=9)](image)

The second category of challenges relates to the students (Figure 11) and was to a majority mentioned by pre-service teachers. Most concerns are expressed regarding the language competence of the students (PT1, PT2, PT4, PT5, IT8) which is seen as too low especially in
the first years (PS1, PS4, IS8). Pre-service teacher 5 even worries about students who do not know any English at all, which is normally not the case in Austrian classrooms. Additionally, motivational problems are mentioned (PT3, PT5, IT8). This stands in contrast to research findings by other researchers (cf. Chapter 2.2) who report that CLIL provision is motivating for the students. Pre-service teacher 4 addresses motivation from a different angle, namely that CLIL PE provision might dampen the enthusiasm of the students to be active. Further research with a specific focus on students’ motivation in CLIL PE seems doubly relevant. On the one hand motivation is reported to be an essential factor to learning a language successfully (cf. Harmer 2007: 98) and on the other hand CLIL provision should not negatively affect the students’ enthusiasm for the content/being active. Another interesting teacher belief relates to the fact that students would have to switch from German instructions to English after certain lessons. In-service teacher 8 believes that this “[verurteilt CLIL PE] auf jeden Fall zum Scheitern […] [sets up CLIL PE] definitely to fail […]”. Pre-service teacher 4 also worries that there might be problems with code-switching, or continuous translations that might be necessary in order that all students understand. Additionally, especially younger students might “[...] verwenden automatisch die Sprache die ihnen auf der Zunge liegt sag ich jetzt einmal [[…] I would say that they use the language automatically that is on the tip of their tongue]“ (PT3).

Two pre-service teachers (PT4, PT5) also worry that CLIL provision might be too much strain for students with a first language other than German. PT4 believes that having to learn a third language is over-challenging such students. However, they learn English as a foreign language in the language classrooms anyway. This is also discussed in the literature - Piske (2015: 115-119), for example, thinks that a different first language is unproblematic for CLIL provision, but adds that studies that focus on learners with a different language background are missing in Germany and a final conclusion cannot safely be made (cf. Chapter 2.2.3).
Figure 11: Challenges of CLIL PE concerning students (n=9)

The biggest concerns in the final category (cf. Figure 12) relate to the presumed reduction of the activity time during the lessons (PT1, PT2, PT4, PT5, IT6), which is also accounted for in the literature. Nietsch & Vollrath (2003: 155-156) point out that students need to be as active as possible, hence language work that has to be done without a connection to movement (e.g. learning from vocabulary lists) cannot be the aim of CLIL PE. In addition, in-service teacher 8 comments that PE is seen as a counterbalance to top-heavy subjects, a status that is seen as lost with CLIL PE provision.

Figure 12: Diverse challenges of CLIL PE (n=9)
7.6 Teaching CLIL PE

This chapter comprises answers to three questions that all relate to the interviewees’ teaching of CLIL PE, namely how desirable it is for them to teach CLIL PE, how well they feel equipped to do so and what additional education they would need.

Generally, a slight majority of all interviewees (PT3, PT5, IT7, IT8, IT9) answer that they would like to teach CLIL PE\(^7\) (cf. Figures 13, 14) with more in-service teachers answering in the affirmative. Those pre-service teachers who feel CLIL teaching to be desirable have in common that they report their language competence in English to be above the Austrian Matura level and see a great potential in CLIL PE (PT3) or their personal experience with CLIL (PT5). The pre-service teachers whose answer was negative argue either with their personal deficient language knowledge (PT4), already enough workload (PT2) or that

\[
\ldots \text{die Problematik} \ldots \text{ist, dass sie [die Schülerinnen] das Deutsch noch nicht beherrschen. Dadurch stelle ich mir einfach die Frage wie sinnvoll es ist ihnen da noch eine dritte Sprache aufs Auge zu drücken \ldots \text{the problem} \ldots \text{is} \ldots \text{that they [the students] are not proficient in German. Thus I wonder whether it is sensible to force a third language on them]} \quad \text{(PT1).}
\]

Those in-service teachers who think that CLIL PE is desirable also report a good command of their English above the Austrian Matura level (IT7, IT8) or show a very positive attitude towards this concept (IT9). For in-service teacher 6 it is not desirable to teach CLIL PE:

\[
\text{Aber mir als Sportlehrer ist es nicht persönlich wichtig, dass sie das auch auf Englisch beherrschen. Aber wenn die Schule das möchte, dann würde ich das so, sozusagen forciert unterrichten.} \quad \text{[For me personally as a PE teacher it is not important that the students have a good command of English. If the school wants that, I would teach it intensified so to speak.]} \quad \text{(PT1).}
\]

These findings do not correlate with what Rymarczyk (2004: 289) writes, namely that first there has to be a lot of persuasion and informing to be done in order to implement CLIL PE as a majority of teachers think that teaching CLIL PE is not desirable.

---

\(^7\) Most answers were given on a scale from 0% (not desirable at all) to 100% (very desirable).
Nearly all of the pre-service teachers (PT1, PT2, PT3, PT4) feel ill-equipped to teach CLIL PE lessons (see Figures 15, 16). These findings are not surprising when (pre-service) teacher education is considered which is lacking in CLIL related courses for this target group (cf. Chapter 2.4.2). Pre-service teacher 5 is the only one who says she feels prepared. She is also the one who reports the best command of English. One teacher who feels ill-equipped would nonetheless dare to teach CLIL PE (PT3). Although the in-service teachers’ formal qualifications concerning CLIL are equal to those of the pre-service teachers only one teacher says that she feels ill-equipped to teach CLIL PE (IT6). This is also the teacher with the lowest self-reported English level. To sum up, the desirability to teach CLIL PE seems to be strongly influenced by the (perceived) personal language level.
In order to explore what the teachers need so as to feel competent to teach CLIL PE they were asked which further education they required. The answers are shown in Figure 17. Interestingly, courses that address English language didactics were only mentioned once. It seems that the teachers are more concerned with their own language abilities (e.g. materials and technical language) than the challenge of teaching a foreign language to their students. This result comes to no surprise given their views on CLIL and language learning reported in previous chapters (cf. 7.1, 7.3, 7.4). Yet, some of them still would consider being part of CLIL.
In addition, the teachers were asked about a hypothetical bilingual teacher education program: Would you have chosen a teacher education program that additionally qualifies you as a CLIL PE teacher in addition to the regular qualifications, if it had existed? Surprisingly nearly all teachers (PT1, PT2, PT4, PT5, IT6, IT7, IT8, IT9) answered in the affirmative. Only pre-service teacher 3 is not sure, but she also said “vielleicht schon, weil ich Sprachen mag [maybe yes because I like languages]”.

The reasons behind the answers are diverse:

- [D]u bist in der Sprache drinnen, du bleibst in der Sprache drinnen. Und je mehr man drinnen bleibt, desto präsenter ist sie und desto weniger verlernt man sie. [If you use a language, you do not forget it. The more you use it, the better you can use it, you do not forget it.] (PT1).

- Ich könnte leichter ins Ausland gehen [Going abroad is easier.] (PT1).

- [W]eil Zusatzqualifikation immer super ist und weil eine Sprache etwas sehr Lebendiges ist. [Additional qualification is always good to have and language is something that is very much alive.] (PT4).

- Ja, weil es super ist! [Because it is great!] (PT5)


- Ja, weil English einfach die Weltsprache ist und ich spreche sie auch gerne. [Because English is the global language and I love to speak English.]” (IT8).
This chapter briefly summarizes all empirical findings. First of all, answers to what CLIL means for the individual teachers were sought. Generally, beliefs of what CLIL is, seem to be informed by what teachers have already experienced and/or have heard about the concept. Although four out of nine teachers report that they have either gone to a CLIL class, had a CLIL class in school or work in a school with CLIL provision none of the teacher focused on the dual approach of content and explicit language learning. They all rather take the stance that the language is acquired naturally in parallel, a view which stands in contrast to the definition of CLIL provided in Chapter 2 (cf. Chapter 7.1).

Second, the role that language and communication plays in the teachers’ PE lessons is evaluated. Generally, it can be seen that the view on PE, on language use as well as communication and therefore, the actual use of language varies considerably among the teachers. The literature says that using language for oral explanations and instructions is an important issue in PE which is also a topic of all the teachers’ answers. Moreover, the interviewees agree that giving feedback and correcting is mostly teacher-oriented, but five teachers also employ peer feedback. This is one area in which the student-talking time can be increased meaningfully because this is an important building block of CLIL PE and discloses opportunities for language development (cf. Chapter 7.2).

Subsequently, the teachers tried to find reasons why PE is suitable for CLIL provision and named six different categories that can also be found in the literature, namely the chance of learning through movement, existing technical terms of sports in English, culture as the connecting factor, opportunities for authentic language use, different conditions of PE and pleasure. Explanations and underlying beliefs differ among the teachers even when they discuss the same reason why PE is suitable for CLIL provision. Subsequently, the teachers think of chances to foster the development of the CLIL language. The answers again show an understanding of CLIL where language is learnt simply by being immersed in a ‘language bath’. This might also be part of the reason why teachers name oral receptive skills to be the language area that can be improved most readily, followed by learning or picking up lexis (cf. Chapter 7.3).
Apart from content and language learning, fostering cultural learning is an explicit aim of CLIL, which is also anchored in the Austrian curriculum. In this category the pre- and in-service teachers’ answers differ. While pre-service teachers tend either to not know the concept of cultural learning or to show a rather narrow understanding, referring to English and American sports, the in-service teachers rather view sports as being intercultural per-se and suggested opportunities like using fair play to foster cultural learning, which shows a wider understanding of this concept. Where these differences of the two groups stem from cannot be explained (cf. Chapter 7.4).

To follow up on CLIL PE teaching, the interviewees were asked about perceived challenges that need to be met in order to provide CLIL PE successfully. Answers from both groups of teachers can be categorized into concerns related to the teachers, concerns related to the students and diverse concerns. Nearly all interviewees worry about the CLIL PE teacher’s language competence which reflects the discussion arising in the literature how well one’s English should be. In connection to the language competence a CLIL PE teacher needs, the interviewees also see problems in the choice of who should teach CLIL PE. Those who commented on this issue agree that either an English and PE teacher or a native speaker should be put in charge. However, using native speakers is also seen critically because they might not be sporty themselves. Concerns over language competence is too low is also transferred to the students by some teachers. Another important challenge is the perceived reduction of activity time, something most PE teachers oppose. In my opinion, this problem might be reduced by a thorough planning of CLIL PE lessons. This however might consume a considerable amount of time since there are almost no materials available. Interestingly, the problem of a long preparation time is only mentioned by one pre-service teacher. This might be caused by the teachers’ general misunderstanding of CLIL PE, namely that the lessons are simply conducted in English and they would ‘only’ have to know the technical terms (cf. Chapter 7.5).

The final results concern the desirability of teaching CLIL PE and how well equipped the teachers feel. Five out of nine teachers report that they would like to try teaching CLIL classes. These teachers are also the ones with a reported language level better than the estimated Austrian Matura level. However, nearly all teachers say that they do not feel well prepared to do so. This is not surprising because opportunities to study and prepare for
CLIL teaching are scarce or even non-existent with regard to a focus on secondary PE. The answers to what additional education the teachers would require vary. Interestingly, only two teachers mention that English language didactics need to be addressed. Instead the interviewees seem rather concerned with developing their own language abilities. Another interesting result is that all teachers would have chosen teacher education with additional focus on CLIL teaching, if it had been available (cf. Chapter 7.6).
8 Conclusion

This diploma thesis set out to explore the pre- and in-service teacher beliefs regarding content and language integrated learning (CLIL) in physical education (PE). In general, literature on the topic is scarce and studies about PE teacher beliefs are missing. However, for me knowledge of what teachers think is vital because PE teachers are the ones who potentially have to teach CLIL PE and exchange among (CLIL) PE teachers might be difficult because it is rarely used in Austria. The aim of the thesis was therefore to answer the following research questions:

- What are pre- and in-service teacher beliefs about CLIL PE?
- What are the similarities and differences between these two groups?

Before embarking on the empirical study it was necessary to base the study on a theoretical foundation including work from the areas of CLIL, PE and teacher beliefs. CLIL is a concept that enjoys great popularity and is anchored in mainstream education. However, after many years of practice CLIL still lacks a common definition and a practice valid for all. The establishment of a common didactic model that provides guidelines for integrating content and language learning is desirable, but still missing. CLIL PE, the diploma thesis’ focus, is still rather a special combination because it is rarely used and researched. However, theoretical considerations (cf. Nietsch & Vollrath 2003, Schmidt-Millard 2004) and practical research (cf. Coral 2012a+b, 2013; Rottmann 2006; Devos 2013) argue for its suitability. Finally, the working definition of beliefs for the empirical part of the thesis is a rather open one viewing beliefs as propositions that individuals hold and influence thought and behavior (Borg 2011: 186). Now that we have major theoretical considerations in mind, the focus is now shifted to synthesized findings of the empirical part.

The first research question seeks to establish pre- and in-service teacher beliefs about CLIL PE. The most important finding relates to the fact that teacher beliefs about CLIL seem to be informed by an understanding of CLIL that reduces language learning to occur implicitly. This can be observed in instances throughout the interviews. First, the answers to what CLIL means for individual teachers provide interesting insights. Although four out of nine teachers report that they have either gone to a CLIL class, held a CLIL class or work in a
school with CLIL provision none of the teachers focuses on the dual approach of content and explicit language learning. They all rather take the stance that the language is acquired naturally simultaneously, a view which does not conform to the definition of CLIL provided in Chapter 2. This belief is taken up again when the teachers report that listening skills and vocabulary are the language areas that can be fostered best simply because of the amount of input provided. Interestingly, the teachers display a heterogeneous view concerning spoken production being influenced by rather old approaches to language and PE teaching. Furthermore, this belief of language learning in CLIL can also be detected when the teachers were asked to name expected challenges. Only two teachers worry that content teachers might lack the competence to create a language learning environment and only one argues that planning lessons might be time consuming.

The second research question concerns similarities and differences between pre- and in-service teachers. Surprisingly the interviewees’ answers did not reveal many differences. I would have anticipated clearer differences in some areas like the role of language and communication in PE due to different educational curricula and the view of language learning due to the different decades of schooling. An example is the role that language and communication plays in the PE teachers’ classroom. I would have expected that the two groups display differences because of the different curricula they had at university. However, rather individual stances are taken.

In contrast, research revealed unexpected differences in three areas. The first differences are related to culture. Surprisingly, some pre-service teachers do not understand the term “cultural learning” at all or exhibit only a narrow understanding of culture referring to traditional Anglo-American sports only. This is in stark contrast to the fact that cultural learning is in the general part of the Austrian curriculum for secondary schools. It cannot be deduced from in-service teachers’ answers why they exhibit a greater awareness concerning cultural learning.

Another area that produced interesting differences among the two groups concern how desirable it is to teach CLIL PE. A majority (three out of four) of in-service teachers would like to try teaching CLIL PE compared to two out of five pre-service teachers. Furthermore, teachers also displayed differences in regard to how well-equipped they feel to teach CLIL despite the same lack of training concerning CLIL teaching. However, in both cases the
teachers’ answers do not allow us to draw conclusions about the reasons behind the answers.

All these findings allow us to reason that teacher beliefs concerning CLIL are more strongly informed by personal experiences and preferences than knowledge about this educational approach.

Clearly, the empirical study at hand has its limitations. First and foremost, the sample size of five pre-service teachers and four in-service teachers is too small to produce results that allow the drawing of conclusions to all pre- and in-service secondary PE teachers. Furthermore, the choice of the term ‘pre-service teacher’ is in itself problematic. The prefix ‘pre’ indicates that those participants still study and do not have experience in working as regular teachers. This is not the case with the pre-service teachers that participated in the study. All of them have working experience of a maximum of three years. However, this also reflects my impression that many students of PE at the end of their education already work as teachers.

In relation to further actions, the results can cautiously (small sample size!) be used as a starting point for suggesting further issues in research, the development of teacher education and CLIL PE programs. Essentially, most interviewees show positive tendencies towards the concept and a majority of them display a willingness to teach it. This might serve as a good basis to dare to develop CLIL PE programs at schools. However, in order to establish CLIL PE fruitfully the teachers urgently need more support. On the one hand, more information on this concept is vital to ensure high quality. On the other hand, those willing to teach CLIL PE need more support with material and professional education, particularly in regard to meeting language aims as well. This leads to another issue that shows much room for development, namely teacher education and further education. In this context, the establishment of electives in the regular PE teacher program seems desirable in order to put CLIL PE on a professional foundation. This development should be accompanied by more research to support the qualitative development of CLIL PE. Furthermore, the area of (CLIL) PE teacher beliefs is currently an under-researched area. In addition, the need for more research concerning the influences of CLIL on students with another first language than the language of instruction arose from theoretical research and concerns that some teachers expressed.
To conclude my diploma thesis I would like to strongly argue for two further developments. First of all, teachers as important stakeholders need to be better informed about educational approaches because they are the ones who realize them. Second, CLIL PE should find more attention both in research and practice because it seems to be a good opportunity for providing learners with a different, active and authentic experience of language learning.
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10 List of Tables

Table 1: Constitutive teaching techniques (cf. Thürmann 2008: 78-86) ........................................ 17
Table 2: Examples of language needed in CLIL PE
  (examples taken from Nietsch & Vollrath 2003: 154-155) ........................................ 41
Table 3: Foreign language use in CLIL PE classroom activity (Devos 2013: 203) .................... 46
Table 4: Lesson plans on CLIL PE .......................................................................................... 47
Table 5: Defining teacher beliefs (Fives & Buehl 2012: 473) ............................................. 52
Table 6: Transcription rules .................................................................................................. 68
Table 7: Teacher 1 .................................................................................................................. 70
Table 8: Teacher 2 .................................................................................................................. 70
Table 9: Teacher 3 .................................................................................................................. 71
Table 10: Teacher 4 .............................................................................................................. 71
Table 11: Teacher 5 .............................................................................................................. 71
Table 12: Teacher 6 .............................................................................................................. 72
Table 13: Teacher 8 .............................................................................................................. 72
Table 14: Teacher 7 .............................................................................................................. 72
Table 15: Teacher 9 .............................................................................................................. 72
Table 16: Differences in language use of lower and upper secondary classes .................... 79
11 List of Figures

Figure 1: 4Cs Framework (Coyle et al. 2010: 41) ................................................................. 18
Figure 2: The Language Triptych (Coyle et al. 2010: 36) ......................................................... 19
Figure 3: Aims of CLIL PE (adopted from Nietsch & Vollrath 2003: 149) ............................... 37
Figure 4: Factors which influence teacher beliefs (Bovellan 2014: 55) ................................. 56
Figure 5: Three functions of beliefs (Fives & Buehl 2012: 478) ............................................... 58
Figure 6: Internal and external factors in the enactment of beliefs
(Buehl & Beck 2015: 74) ........................................................................................................... 60
Figure 7: Summarizing content analysis (Mayring 2014: 66) ..................................................... 69
Figure 8: Teacher-oriented language use and communication (n=9) ........................................... 78
Figure 9: Reasons for suitability of PE for CLIL (n=9) ............................................................ 83
Figure 10: Challenges of CLIL PE concerning teachers (n=9) ................................................ 92
Figure 11: Challenges of CLIL PE concerning students (n=9) .................................................. 94
Figure 12: Diverse challenges of CLIL PE (n=9) ....................................................................... 94
Figure 13: In-service teachers: Desirability to teach (n=4) ....................................................... 96
Figure 14: Pre-service teachers: Desirability to teach (n=5) ..................................................... 96
Figure 15: In-service teachers: Equipped to teach? (n=4) ....................................................... 97
Figure 16: Pre-service teachers: Equipped to teach? (n=5) ...................................................... 97
Figure 17: Further education (n=9) .......................................................................................... 98
12 Appendix

Summary (German)

Interview guide

Curriculum vitae
Summary (German)

„Content and Language Integrated Learning“ (CLIL) ist eine europaweit etablierte Praxis des Unterrichts, die in verschiedenen Formen erfolgreich eingesetzt wird. Ziel ist es, Inhalte eines Sachfachs mit Hilfe einer lebenden Fremdsprache, zumeist Englisch, so zu unterrichten, dass sowohl fachspezifische Inhalte also auch die Sprachentwicklung gefördert werden. Wichtig dabei ist, dass Inhalte nicht einfach in der fremden Sprache gehalten werden, sondern, dass diese Sprache dort wo es notwendig erscheint explizit behandelt wird.


Im Praxisteil wird das Untersuchungsdesign präsentiert und argumentiert. Insgesamt wurden Leitfadeninterviews mit fünf Studentinnen und vier fertigen Lehrerinnen durchgeführt, nach der standardorthographischen Weise transkribiert und mittels zusammenfassender qualitativer Inhaltsanalyse nach Mayring ausgewertet. Im Rahmen der Untersuchung zeigt sich eine eher positive Grundhaltung der Teilnehmerinnen hinsichtlich verschiedener Aspekte von Bewegung und Sport mit CLIL, sowie ein Verständnis von CLIL das kein explizites Sprachlernen, sondern eine Sprachverbesserung im Vorbeigehen sieht.
Interviewleitfaden

Hinweis: Anonym
Hinweis: Das Interview wird zu Analysezwecken aufgezeichnet.
Hinweis: Das Interview geht um deine persönliche Einstellungen/Erfahrungen/Meinungen und es gibt kein richtig oder falsch.

Zur Person:

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<td>Fächerkombi</td>
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<td>Unterricht seit</td>
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Anwendung in folgenden Situationen

Generelle Haltung/Erfahrung mit CLIL

Wenn du „CLIL/EAA/bilingualer Sachfachunterricht“ hörst, was verbindest du damit?

Hattest du in deiner Schulzeit Fachunterricht auf Englisch? Bitte beschreibe deine Erfahrungen

Hattest du während dem Studium einen Kurs/Teile davon zu CLIL? Bitte beschreibe deine Erfahrungen

Hast du eine Weiterbildung zu CLIL besucht? Bitte beschreibe deine Erfahrungen

Hast du in deiner bisherigen Laufbahn schon Erfahrungen mit CLIL in BuS gesammelt? Bitte beschreibe deine Erfahrungen

Bewegung und Sport:

Welche Rolle spielen Sprache/Kommunikation in deinem Sportunterricht? Wann/wie setzt du Sprache ein? + Beispiele
Gibt es Unterschiede zw. Unterstufe/Oberstufe punkte Sprachgebrauch?

In welcher Weise wurde Sprache/Kommunikation im Sportunterricht in deiner Ausbildung bzw. Weiterbildung thematisiert?

Verknüpfung von Englisch in Bewegung und Sport (= CLIL PE)
Denke nun an einen bilingualen Sportunterricht. Weshalb könnte BuS gut für den bilingualen Sachfachunterricht geeignet sein?

Wo siehst du Entwicklungspotenzial für interkulturelle Kompetenz? Welche Inhalte?
Welche Inhalte eigenen sich deiner Meinung besonders gut für Spracharbeit in BuS?

Wo siehst du Entwicklungspotenzial für die Sprache im Unterricht/ Welche Bereiche von Englisch (lesen, sprechen, schreiben, hören, voc, gr) können gut verbessert werden? Unterschied Unterstufe/Oberstufe?

Welche Schwierigkeiten siehst du?

Persönliche Motivation

Wie gerne würdest du CLIL PE unterrichten? Warum?

Wie gut fühlst du dich vorbereitet um CLIL PE zu unterrichten?

Welche zusätzlichen Bildungsangebote würdest du brauchen, dass du dich kompetent fühlst Bewegung und Sport auf Englisch zu unterrichten?

Würdest du an einer bilingualen Sportlehrer/innen/ausbildung teilnehmen?

Ist da noch etwas, dass du mir im Zusammenhang von EAA und BuS mitgeben möchtest?
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